Department of Defense
Fiscal Year (FY) 2018 Budget Estimates

May 2017

Defense Logistics Agency

Defense-Wide Justification Book Volume 5 of 5

Research, Development, Test & Evaluation, Defense-Wide

THIS PAGE INTENTIONALLY LEFT BLANK

Table of Volumes

Volume 5 Table of Contents

THIS PAGE INTENTIONALLY LEFT BLANK

Department of Defense
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Research, Development, Test & Eval, DW	214,251	188,241	188,070				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Department of Defense
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Research, Development, Test & Eval, DW	188,241	188,070		188,070	319,796		319,796
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Department of Defense
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Summary Recap of Budget Activities	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Advanced Technology Development	133,321	140,096	140,096				
System Development And Demonstration	51,854	44,237	44,066				
Management Support	5,524						
Operational System Development	23,552	3,908	3,908				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				
Summary Recap of FYDP Programs							
Research and Development	190,699	184,333	184,162				
Central Supply and Maintenance	23,552	3,908	3,908				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Department of Defense
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Summary Recap of Budget Activities	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Advanced Technology Development	140,096	140,096		140,096	270,925		270,925
System Development And Demonstration	44,237	44,066		44,066	44,177		44,177
Management Support							
Operational System Development	3,908	3,908		3,908	4,694		4,694
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796
Summary Recap of FYDP Programs							
Research and Development	184,333	184,162		184,162	315,102		315,102
Central Supply and Maintenance	3,908	3,908		3,908	4,694		4,694
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Summary Recap of Budget Activities	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Advanced Technology Development	133,321	140,096	140,096				
System Development And Demonstration	51,854	44,237	44,066				
Management Support	5,524						
Operational System Development	23,552	3,908	3,908				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				
Summary Recap of FYDP Programs							
Research and Development	190,699	184,333	184,162				
Central Supply and Maintenance	23,552	3,908	3,908				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Summary Recap of Budget Activities	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Advanced Technology Development	140,096	140,096		140,096	270,925		270,925
System Development And Demonstration	44,237	44,066		44,066	44,177		44,177
Management Support							
Operational System Development	3,908	3,908		3,908	4,694		4,694
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796
Summary Recap of FYDP Programs							
Research and Development	184,333	184,162		184,162	315,102		315,102
Central Supply and Maintenance	3,908	3,908		3,908	4,694		4,694
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Appropriation	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Defense Logistics Agency	214,251	188,241	188,070				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

Appropriation	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Defense Logistics Agency	188,241	188,070		188,070	319,796		319,796
Total Research, Development, Test & Evaluation	188,241	188,070		188,070	319,796		319,796

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	Sec
33	0603264S	Agile Transportation for the 21st Century (AT21) - Theater Capability	03	1,508							U
49	0603680S	Manufacturing Technology Program	03		31,259	31,259					U
51	0603712S	Generic Logistics R&D Technology Demonstrations	03	15,093	11,011	11,011					U
52	0603713S	Deployment and Distribution Enterprise Technology	03	29,888							U
54	0603720S	Microelectronics Technology Development and Support	03	86,832	97,826	97,826					U
		Advanced Technology Development		133,321	140,096	140,096					
128	0605070S	DOD Enterprise Systems Development and Demonstration	05	11,501	12,631	5,660					U
130	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	30,568	26,657	30,457					U
131	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	9,785	4,949	7,949					U
		System Development And Demonstration		51,854	44,237	44,066					
159	0605502S	Small Business Innovative Research	06	5,524							U
		Management Support		5,524							
244	0708011S	Industrial Preparedness	07	21,843							U
245	0708012S	Pacific Disaster Centers	07	1,709	1,754	1,754					U

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Sec
33	0603264S	Agile Transportation for the 21st Century (AT21) - Theater Capability	03								U
49	0603680S	Manufacturing Technology Program	03	31,259	31,259		31,259	40,511		40,511	U
51	0603712S	Generic Logistics R&D Technology Demonstrations	03	11,011	11,011		11,011	10,611		10,611	U
52	0603713S	Deployment and Distribution Enterprise Technology	03								U
54	0603720S	Microelectronics Technology Development and Support	03	97,826	97,826		97,826	219,803		219,803	U
		Advanced Technology Development		140,096	140,096		140,096	270,925		270,925	
128	0605070S	DOD Enterprise Systems Development and Demonstration	05	12,631	5,660		5,660	6,266		6,266	U
130	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	26,657	30,457		30,457	24,436		24,436	U
131	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	4,949	7,949		7,949	13,475		13,475	U
		System Development And Demonstration		44,237	44,066		44,066	44,177		44,177	
159	0605502S	Small Business Innovative Research	06								U
		Management Support									
244	0708011S	Industrial Preparedness	07								U
245	0708012S	Pacific Disaster Centers	07	1,754	1,754		1,754	1,770		1,770	U

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	Sec
246	0708047S	Defense Property Accountability System	07		2,154	2,154					U
		Operational System Development		23,552	3,908	3,908					
Total Research, Development, Test & Eval, DW				214,251	188,241	188,070					

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense-Wide
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Sec
246	0708047S	Defense Property Accountability System	07	2,154	2,154		2,154	2,924		2,924	U
		Operational System Development		3,908	3,908		3,908	4,694		4,694	
Total Research, Development, Test & Eval, DW				188,241	188,070		188,070	319,796		319,796	

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense Logistics Agency
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	Sec
33	0603264S	Agile Transportation for the 21st Century (AT21) - Theater Capability	03	1,508							U
49	0603680S	Manufacturing Technology Program	03		31,259	31,259					U
51	0603712S	Generic Logistics R&D Technology Demonstrations	03	15,093	11,011	11,011					U
52	0603713S	Deployment and Distribution Enterprise Technology	03	29,888							U
54	0603720S	Microelectronics Technology Development and Support	03	86,832	97,826	97,826					U
Advanced Technology Development				133,321	140,096	140,096					
128	0605070S	DOD Enterprise Systems Development and Demonstration	05	11,501	12,631	5,660					U
130	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	30,568	26,657	30,457					U
131	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	9,785	4,949	7,949					U
System Development And Demonstration				51,854	44,237	44,066					
159	0605502S	Small Business Innovative Research	06	5,524							U
Management Support				5,524							
244	0708011S	Industrial Preparedness	07	21,843							U
245	0708012S	Pacific Disaster Centers	07	1,709	1,754	1,754					U
246	0708047S	Defense Property Accountability System	07		2,154	2,154					U
Operational System Development				23,552	3,908	3,908					

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense Logistics Agency
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Sec
33	0603264S	Agile Transportation for the 21st Century (AT21) - Theater Capability	03								U
49	0603680S	Manufacturing Technology Program	03	31,259	31,259		31,259	40,511		40,511	U
51	0603712S	Generic Logistics R&D Technology Demonstrations	03	11,011	11,011		11,011	10,611		10,611	U
52	0603713S	Deployment and Distribution Enterprise Technology	03								U
54	0603720S	Microelectronics Technology Development and Support	03	97,826	97,826		97,826	219,803		219,803	U
		Advanced Technology Development		140,096	140,096		140,096	270,925		270,925	
128	0605070S	DOD Enterprise Systems Development and Demonstration	05	12,631	5,660		5,660	6,266		6,266	U
130	0605080S	Defense Agency Initiatives (DAI) - Financial System	05	26,657	30,457		30,457	24,436		24,436	U
131	0605090S	Defense Retired and Annuitant Pay System (DRAS)	05	4,949	7,949		7,949	13,475		13,475	U
		System Development And Demonstration		44,237	44,066		44,066	44,177		44,177	
159	0605502S	Small Business Innovative Research	06								U
		Management Support									
244	0708011S	Industrial Preparedness	07								U
245	0708012S	Pacific Disaster Centers	07	1,754	1,754		1,754	1,770		1,770	U
246	0708047S	Defense Property Accountability System	07	2,154	2,154		2,154	2,924		2,924	U
		Operational System Development		3,908	3,908		3,908	4,694		4,694	

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense Logistics Agency
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	Sec
--	------	----	---	----------	----------	----------	----------	----------	----------	----------	-
Total Defense Logistics Agency				214,251	188,241	188,070					

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

Defense Logistics Agency
FY 2018 President's Budget Request
Exhibit R-1 FY 2018 President's Budget Request
Total Obligational Authority
(Dollars in Thousands)

18 May 2017

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

Line No	Program Element Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	FY 2018 Base	FY 2018 OCO	FY 2018 Total	Sec
Total Defense Logistics Agency				188,241	188,070		188,070	319,796		319,796	

R-1C1F: FY 2018 President's Budget Request (Published Version), as of May 18, 2017 at 08:34:17

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

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

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

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

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

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

THIS PAGE INTENTIONALLY LEFT BLANK

Defense Logistics Agency • Budget Estimates FY 2018 • RDT&E Program
Exhibit R-1
(Listing by Budget Activity, then Program Element Number)

BA# 03: Advanced Technology Development (ATD)

				Cost ($ in Millions)					
Line#	**BA#**	**PE#**	**PE Title**	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
33	03	0603264S	Agile Transportation for the 21st Century (AT21) Theater Capability	10.435	1.508	0.000	0.000	-	0.000
49	03	0603680S	Manufacturing Technology Program (ManTech)	0.000	0.000	31.259	40.511	-	40.511
51	03	0603712S	Generic Logistics R&D Technology Demonstrations (Log R&D)	0.000	15.093	11.011	10.611	-	10.611
52	03	0603713S	Deployment and Distribution Enterprise Technology	145.998	29.888	0.000	0.000	-	0.000
54	03	0603720S	Microelectronics Technology Development and Support (DMEA)	305.434	86.832	97.826	219.803	-	219.803
Total: Advanced Technology Development (ATD)				461.867	133.321	140.096	270.925	-	270.925

BA# 05: System Development & Demonstration (SDD)

				Cost ($ in Millions)					
Line#	**BA#**	**PE#**	**PE Title**	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
128	05	0605070S	DoD Enterprise Systems Development and Demonstration	76.178	11.501	5.660	6.266	-	6.266

BA# 05: System Development & Demonstration (SDD)

				Cost ($ in Millions)					
Line#	**BA#**	**PE#**	**PE Title**	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
130	05	0605080S	Defense Agency Initiatives (DAI) - Financial System	79.757	30.568	30.457	24.436	-	24.436
131	05	0605090S	Defense Retired and Annuitant Pay System (DRAS)	18.030	9.785	7.949	13.475	-	13.475
Total: System Development & Demonstration (SDD)				173.965	51.854	44.066	44.177	-	44.177

BA# 06: RDT&E Management Support

				Cost ($ in Millions)					
Line#	**BA#**	**PE#**	**PE Title**	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
159	06	0605502S	Small Business Innovative Research (SBIR)	17.516	5.524	0.000	0.000	-	0.000
Total: RDT&E Management Support				17.516	5.524	0.000	0.000	-	0.000

BA# 07: Operational Systems Development

				Cost ($ in Millions)					
Line#	**BA#**	**PE#**	**PE Title**	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**
244	07	0708011S	Industrial Preparedness	0.000	21.843	0.000	0.000	-	0.000
245	07	0708012S	Pacific Disaster Centers	16.582	1.709	1.754	1.770	-	1.770
246	07	0708047S	Defense Property Accountability System (DPAS)	0.000	0.000	2.154	2.924	-	2.924
Total: Operational Systems Development				16.582	23.552	3.908	4.694	-	4.694

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603264S *I Agile Transportation for the 21st Century (AT21) Theater Capability*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	10.435	1.508	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.943
1: *Agile Transportation for the 21st Century (AT21) Theater Capability*	10.435	1.508	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.943

A. Mission Description and Budget Item Justification

Through the Theater Enterprise Deployment and Distribution (TED2) analysis, the Geographic Combatant Commanders (GCC) identified several gaps between United States Transportation Command's strategic lift processes and GCCs' distribution processes. Highlighted is a lack of capability to (1) manage transportation planning and execution processes for cargo/passenger movement within their respective theaters of operation or (2) match global movement requirements against available lift assets to produce an optimized transportation schedule that meets delivery requirements. AT21 Theater Capability, through the implementation of process improvements, integration of commercial transportation management/optimization tools, and the development of deployment/distribution supporting technologies, will provide the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	1.706	0.000	0.000	-	0.000
Current President's Budget	1.508	0.000	0.000	-	0.000
Total Adjustments	-0.198	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.198	-			

Change Summary Explanation

In FY 2017, PE 0603264S (BA3) Agile Transportation for the 21st Century (AT21) Theater Capability was transferred to a single PE in the Air Force budget (PE 0604776F) in order to support auditability, increase management efficiency, and reduce administrative actions.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603264S / *Agile Transportation for the 21st Century (AT21) Theater Capability*	Project (Number/Name) 1 / *Agile Transportation for the 21st Century (AT21) Theater Capability*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *Agile Transportation for the 21st Century (AT21) Theater Capability*	10.435	1.508	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.943

A. Mission Description and Budget Item Justification

Through the Theater Enterprise Deployment and Distribution (TED2) analysis, the Geographic Combatant Commanders (GCC) identified several gaps between United States Transportation Command's strategic lift processes and GCCs' distribution processes. Highlighted is a lack of capability to (1.) manage transportation planning and execution processes for cargo/passenger movement within their respective theaters of operation or (2.) match global movement requirements against available lift assets to produce an optimized transportation schedule that meets delivery requirements. AT21 Theater Capability, through the implementation of process improvements, integration of commercial transportation management/optimization tools, and the development of deployment/distribution supporting technologies, will provide the capability for Combatant Commanders to manage theater transportation operations from the port of debarkation to the point of need.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Agile Transportation for the 21st Century (AT21) Theater Capability	1.508	-	-
Description: AT21 Theater will, in conjunction with the GCCs, continue business process analysis, business process automation development, and business process technology integration to improve the integration/transition of business processes between the strategic and theater segments, as well as improve theater deployment and distribution business processes. Theater business process analysis will identify opportunities for insertion of industry best practices and technology to improve the efficiency/effectiveness of managing theater deployment and distribution operations. Based on operational requirements emerging from the theater business processes, AT21 will develop, prototype, adapt and transition technologies to enable theater deployment and distribution capabilities. ***FY 2016 Accomplishments:*** Continue data architecture analysis/services work to support reengineered business processes to ensure the seamless transition of deployment and distribution information between strategic & theater legs. Complete development of an AT21 theater optimization tool that automates the Joint Operational Support Airlift Center scheduling process and optimizes airlift mission schedules for operational support airlift requirements			
Accomplishments/Planned Programs Subtotals	1.508	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603264S / *Agile Transportation for the 21st Century (AT21) Theater Capability*	**Project (Number/Name)** 1 / *Agile Transportation for the 21st Century (AT21) Theater Capability*

D. Acquisition Strategy

N/A

E. Performance Metrics

Development of core integrated strategic and theater process maps delineating gaps in information flow and prototype systems to facilitate synchronized transportation management and execution capabilities to improve performance in theater transportation operations. >80% transition rate of proven technologies/capabilities.

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency											Date: May 2017	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*					R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	0.000	31.259	40.511	-	40.511	39.658	39.638	40.113	40.837	Continuing	Continuing
7: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	0.000	0.000	10.924	16.227	-	16.227	16.251	16.827	16.675	17.034	Continuing	Continuing
8: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	0.000	0.000	16.923	17.103	-	17.103	17.568	18.010	18.460	18.886	Continuing	Continuing
9: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration*	0.000	0.000	3.412	7.181	-	7.181	5.839	4.801	4.978	4.917	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Logistics Agency (DLA) Manufacturing Technology (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 FY 16 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 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 Customer Driven Uniform 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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603680S *I Manufacturing Technology Program (ManTech)*

Over the FY 18- FY 22 Planning Period, funds were realigned within the ManTech PE, from the DLA Log R&D PE (0603712S) and DLA Procurement Defense-Wide Fund. These funds will address critical shortfalls in the Improving Industrial Base Manufacturing Processes and Maintaining Viable Supply Sources. The largest requirement was in the Maintaining Viable Supply Sources to develop a long-term, reliable source of linear microcircuits. These devices are critical to maintaining the readiness of front line weapon system electronics. High priority requirements in the Improving Industrial Base Manufacturing Processes SFA included additional funding for battery technology, castings and forging manufacturing technology.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	31.259	36.483	-	36.483
Current President's Budget	0.000	31.259	40.511	-	40.511
Total Adjustments	0.000	0.000	4.028	-	4.028
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Internal Funds Realignment	-	-	4.023	-	4.023
• Pay Increase Assumption	-	-	0.005	-	0.005

Change Summary Explanation

MANTECH was realigned from BA 07 to BA 03 in FY 2017.

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. BASE: FY17PB ($31.259M) + Request for Additional Appropriations ($0.000M).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
7: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	0.000	0.000	10.924	16.227	-	16.227	16.251	16.827	16.675	17.034	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Material Availability (MA) Strategic Focus Area (SFA) is an R&D effort 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 Subsistence Network, the Battery Network, the Castings/Forging Programs and Additive Manufacturing programs.

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. BATTNET conducts R&D initiatives to address sustainment gaps and bridge technical solutions into higher MRLs 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 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.

DLA is also conducting some short-term (FY17-FY18) manufacturing improvements in the Vacuum Electron Tube supply chain within this Budget Project. Electron tubes are still an essential product in Defense and National Security radar systems. included will be value-added studies and tests of alternative materials for tungsten wire and microwave quality glass to address obsolescence in these material supply chains.

The Subsistence Network (SUBNET) Program is a Manufacturing Technology Program and is the successor to the CORANET 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 includes: 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 measures such as reduced cost, increased efficiencies, enhanced quality, and improved surge demand capabilities.

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%

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Improving Industrial Base Manufacturing Processes (formerly Material Availability)	-	10.924	16.227
FY 2017 Plans: The Subsistence Network plan in FY17 is to expand to the broader subsistence network; having awarded the Broad Agency Announcement in 2016. DLA will work short term projects (STPs) with the community of practice partners of the military services, industry and academia. SUBNET plans to improve process capabilities by identifying targets for product, automation and business operation changes, and implementing solutions in the Subsistence Supply Chain to produce such improvements as shorter lead times, higher throughput, reduced inventory and overhead cost, and improved quality. The STPs are required to have a business case, developed in advance to include specific metrics for success as well as return on investment where applicable to ensure that all SUBNET STPs are fully documented, all projects have the potential for implementation in industry; and all projects address a specific DoD/DLA need. The Castings program will receive a significant increase in funding starting in FY17 to cover most of the unfunded requirements identified during the PBR 17 process. Projects identified will 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. Contracts will be competitively awarded in FY17. Proposals are required to include a business case with specific metrics and transition plan for success.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
The Forging program will receive an increase in funding to cover most of the unfunded requirements identified during the PBR17 process. Proposals are required to include a business case with specific metrics and transition plan for success. The Forging consortium will also pursue additional forging manufacturing advances from successful DLA SBIR projects selected in FY2014. The Battery Network funding will be applied to pursue additional projects including production readiness of lithium conformable soldier batteries, military ground vehicle batteries, and aviation batteries; manufacturing transition of legacy and obsolete lead acid and nickel cadmium batteries to advanced lithium-ion batteries; and battery manufacturing automation and optimization technologies. These projects will address pressing supply chain issues by migrating from declining manufacturing to a high growth industrial base, and will achieve cost reduction by optimizing the manufacturing design, assembly, and test processes. The Additive Manufacturing plan is for DLA to partner with the Military Services to use AM to produce parts. DLA and the Services will identify candidate parts, convert technical data to 3D format to facilitate AM, procure the parts, and document the process for AM benefits. The Services will review newly created technical data packages (TDP), test the parts, and qualify AM as an acceptable process to produce the parts. FY 16 – FY 20: Funding for Additive projects will be reallocated from other MA SFA thrusts and classified into the Additive Manufacturing Thrust. ***FY 2018 Plans:*** 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 Program will also leverage new battery manufacturing technologies for the supply chain that have been developed in SBIR - electrode laser cutting, solvent-free electrode production, low cost materials production or recycling, advanced performance cells. DLA will also complete the initial investments in manufacturing and material improvements for the vacuum electron tube supply base (used in microwave and radar systems) and pursue additional opportunities. 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 Small Business Innovation Research 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. 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. Contracts will be			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
competitively awarded 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. The Forging program will also 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 identified will 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. Contracts will be competitively awarded to fulfill those requirements. Project will be required to include a business case with specific metrics and transition plan for success. The Forging program will also continue executing projects that are approved and awarded in FY17. DLA R&D plans to leverage Industry and 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 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 metal AM production to obtain land, air and sea 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 AM efforts will provide alternatives in product realization in order to address unfulfilled Warfighter readiness needs.			
Accomplishments/Planned Programs Subtotals	-	10.924	16.227

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) 8 / *Maintaining Viable Supply Sources (formerly High Quality Sources)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
8: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	0.000	0.000	16.923	17.103	-	17.103	17.568	18.010	18.460	18.886	Continuing	Continuing

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.

Strategic Materials is a new area 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. Targeted requirements will be determined with DLA Strategic Materials.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Maintaining Viable Supply Sources (formerly High Quality Sources)	-	16.923	17.103
FY 2017 Plans: 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 begin 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 Advanced Schottky TTL Digital 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 TTL-Compatible CMOS. MAE will also initiate several new implementations including development of a 1 million gate Application-			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** 8 / *Maintaining Viable Supply Sources (formerly High Quality Sources)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Specific Integrated Circuit (ASIC) and 512K Read-Only and Random-Access Memory Emulation Capabilities. It will complete prototyping 350 nanometer emulation circuitry, bringing emulation capability that re-establishes sources for additional NSNs. Strategic Materials: A request for white paper proposals was recently added to DLA's Emerging R&D Requirements BAA for critical initial manufacturing technology requirements in domestic high strength carbon fibers. Additional targeted requirements will be determined with DLA Strategic Materials. Targeted requests for proposals will be conducted to address specific needs and opportunities to ensure that critical strategic materials are available from domestic sources and that process innovations are in place to efficiently produce strategic materials. Manufacturing technologies and capabilities are expected to transition to Title III or specific Weapon System Program funds for industrial base qualification. ***FY 2018 Plans:*** 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.			
Accomplishments/Planned Programs Subtotals	-	16.923	17.103

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / *Manufacturing Technology Program (ManTech)*	Project (Number/Name) 9 / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration*	0.000	0.000	3.412	7.181	-	7.181	5.839	4.801	4.978	4.917	Continuing	Continuing

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.

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Improving Technical and Logistics Information (formerly Industry and Customer Collaboration	-	3.412	7.181

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603680S / *Manufacturing Technology Program (ManTech)*	**Project (Number/Name)** 9 / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
FY 2017 Plans: Continue the distributed pilots and begin transition of the technology into the supply chain. Expand the number of companies participating in the pilots and validating the benefits of the knowledge based approach to IIE development. ***FY 2018 Plans:*** MUST program will continue pilots, process reengineering and transition of the technology into the supply chain. Begin a schedule for implementations to be initiated in FY19. DLIR program will continue moving DLA from PDF Tech Data to Smart Data and Engineering Models and leveraging semantic technology to improve logistics data across the DLA Enterprise. Emerging Manufacturing Technologies addresses the opportunities to start new manufacturing technology developments that occur out of the budget cycle. It is a new start in FY18. Having an Emerging Technologies line allows DLA to get a head start undertaking new technological advances without disrupting ongoing programs. In other programs DLA R&D has been able to cut 12 to 24 months off project start-up lead-times. Saving the startup lead-time allows the Agency to get advanced technology into the hands of the warfighter earlier that would otherwise be the case and begin to realize the benefits of implementing new technology sooner than would otherwise be the case. It also allows ongoing programs to maintain continuity of funding and activity. SBIR phase III efforts (which can't be funded with SBIR funds) are a prime example of activities that will be funded with these funds, examples include emerging battery technologies, and technologies to address strategic materials shortage/risk.			
Accomplishments/Planned Programs Subtotals	-	3.412	7.181

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	15.093	11.011	10.611	-	10.611	10.881	11.182	11.475	11.716	Continuing	Continuing
7: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	0.000	3.471	2.371	4.062	-	4.062	4.167	4.262	4.361	4.454	Continuing	Continuing
8: *Improving Logistics Processes (formerly Logistics Process)*	0.000	5.413	5.236	3.849	-	3.849	3.938	4.052	4.166	4.253	Continuing	Continuing
9: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	0.000	6.209	3.404	2.700	-	2.700	2.776	2.868	2.948	3.009	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, and combined and allied forces the full spectrum of logistics, acquisition and technical services. DLA sources and provides nearly 100 percent of the consumable items the military forces need to operate – including food, fuel and energy, uniforms, medical supplies as well as construction and barrier equipment. DLA supplies more than 85 percent of the military's spare parts, provides logistics information data and products, manages the reutilization of military equipment, and offers document automation and production services. DLAs Generic Logistics R&D Technology Demonstrations (Log R&D) program helps ensure that advanced logistics concepts and business processes are available to accomplish the agency's mission with the leanest possible infrastructure, using the best commercial and government sources and applying the most effective business processes. The Logistics R&D program develops and demonstrates high risk, high payoff technology that provides a significantly higher level of support at lower costs. The program has a proven track record of implementation and benefits.

In December 2013, the DLA Director called for greater flexibility within the R&D program in support of the agency's mission. As a result, the R&D program evolved from single supply chain efforts to Strategic Focus Areas (SFAs). The SFAs support DLA's efforts to make the improvements needed to maintain mission readiness rates in a constrained budget environment.

The three Strategic Focus Areas were renamed in FY 2021 to more clearly capture their focus and scope:

1. Enhancing Analysis, Modeling, and Decision Support (formerly Analytic 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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603712S *I Generic Logistics R&D Technology Demonstrations (Log R&D)*

2. Improving Logistics Processes (formerly Logistics Processes): R&D efforts to develop and implement advanced technology in logistics processes over and above current baseline systems.
3. Emergent Logistics R&D Requirements (formerly Innovative Products and Services for Customers): R&D Efforts to support emergent Logistics R&D requirements arising outside the budget cycle, a frequent occurrence. The SFA begins new projects promptly without the disruption of ongoing projects by funds reallocation. This SFA includes all DLA supply chains and logistics processes.

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

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	15.537	11.011	10.607	-	10.607
Current President's Budget	15.093	11.011	10.611	-	10.611
Total Adjustments	-0.444	0.000	0.004	-	0.004
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.444	-			
• Pay Raise Assumption	-	-	0.004	-	0.004

Change Summary Explanation

During FY 2017 – FY 2021 funds were realigned from PE LOG R&D (0603712S) to the Industrial Preparedness – Manufacturing Technology Program (PE 0708011S). This realignment was needed to accommodate high priority requirements within DLA to improve the industrial base that supports critical weapon systems. In FY17, $4.646M was realigned from LOG R&D to MANTECH for these high priority requirements.

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. BASE: FY17PB ($11.011M) + Request for Additional Appropriations ($0.000M).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	Project (Number/Name) 7 / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
7: *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*	0.000	3.471	2.371	4.062	-	4.062	4.167	4.262	4.361	4.454	Continuing	Continuing

A. Mission Description and Budget Item Justification

R&D efforts to develop and implement 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. Currently, there are three major analytical thrusts: Planning Processes, Medical Supply Chain, and Distribution/Disposition. Planning processes model simulates item and customer demand patterns to improve customer support, lower inventories, acquisition costs, and acquisition lead-times for hardware (Class IX items). Medical Supply Chain Modeling will provide DLA the capability to integrate DLA logistics data and commercial data with satellite and political maps; it will automate for DLA Medical planners the ability to identify entities such as suppliers, customers and vendor distribution centers to enhance spatial awareness of incidents such as catastrophic events and military contingencies. 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 Medical Logistics Network will expand efforts in medical informatics, a growing area of health information systems that combines information science, computer science and health care to improve health systems to manage the healthcare supply chain more efficiently.

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. Current R&D thrusts include finalizing a simulation study for the Eastern Distribution Center (EDC), battery desulfation and lithium battery upgrade projects in support of DLA Distribution, and a Hazardous Waste (HW) disposal feasibility study in support of DLA Disposition Services

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Enhancing Analysis, Modeling, and Decision Support	3.471	2.371	4.062
FY 2016 Accomplishments: Weapon System Support (WSS) initiated efforts to develop a tool for early identification of problem parts and to develop more effective techniques to manage Production Lead Time (PLT). Medical Logistics Network (MLN) Supply Chain transitioned the Fair and Reasonable Evaluation (FRE) capability.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 7 / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Strategic Distribution and Disposition (SDD) conducted a state simulation of DLA's East Coast Distribution Center (EDC). The current state simulation was compared to new potential redesigns of the EDC. The most promising new designs were simulated and compared to the current state for labor savings, reduction in fulfillment time/cycle, and reduction of Material Handling Equipment (MHE). SDD completed the Warehouse Automation and Robotics Exploratory Project (WAREP) and provided a Gap Analysis and an initial ROM BCA. Subsequently, J6 assumed responsibility for the initiative. ***FY 2017 Plans:*** Planning Process will focus on initial capabilities of Supply chain risk management, examine the potential benefits of alternative ownership strategies for inventory and address ways to improve collaboration among DLA, its suppliers and its customers for more effective inventory management. Collaborative efforts will be continued with the Planning Process Owner and his team to develop new projects for FY 2017 awards. Medical Logistics Network (MLN) will transition the Clinical Standardization application to sustainment. A new project in Medical 3D Printing could be undertaken this year. SDD will complete the East Coast Distribution Center (EDC) study and continue supporting DLA Distribution with projects focused on lead-acid and new Lithium-Ion battery technology. Additionally, SDD will finalize an Exploratory Concept project and provide Courses of Action (COAs) on deployable Hazardous Waste (HW) disposal capabilities in support of DLA Disposition. ***FY 2018 Plans:*** SDD will complete the lead-acid and Lithium-Ion battery technology projects in support DLA Distribution and initiate a Hazardous Waste (HW) disposal capabilities proof of concept. The Medical Logistics Network will expand efforts in medical informatics, a growing area of health information systems that combines information science, computer science and health care to improve health systems to manage the healthcare supply chain more efficiently.			
Accomplishments/Planned Programs Subtotals	3.471	2.371	4.062

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 7 / *Enhancing Analysis, Modeling, and Decision Support (formerly Analytic & Decision Support)*

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	Project (Number/Name) 8 / *Improving Logistics Processes (formerly Logistics Process)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
8: *Improving Logistics Processes (formerly Logistics Process)*	0.000	5.413	5.236	3.849	-	3.849	3.938	4.052	4.166	4.253	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 2016 is on the Procurement process, especially aspects driving internal costs and delays in awards.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Improving Logistics Processes (LP)	5.413	5.236	3.849
FY 2016 Accomplishments: Selected WSS Process initiatives for FY 16 in the T/Q area include Cost of Quality in Procurement, Technical Data Availability, processes for Service approval of substituting Additive Manufacturing for selected parts, and Vendor Network Linkage Analysis for improved visibility into potential bad actors. Initiatives in the Procurement area include Reducing Manual Reviews to cut cost and time, Proactive No-Bid Modeling to reduce time to award and improve support to warfighters, and eCommerce to cut internal and parts costs and reduce Production Lead Time. Medical Logistics Network (MLN) transitioned the Fair and Reasonable Evaluation (FRE) capability. Strategic Distribution and Disposition (SDD) completed a feasibility study of using self-service unmanned kiosk type collection points in support of DLA Disposition. Additionally, SDD finalized the DLA Distribution Automation/Robotics exploratory efforts and transitioned them to the Distribution Modernization Program Office and J6.			
FY 2017 Plans:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 8 / *Improving Logistics Processes (formerly Logistics Process)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
T/Q efforts will include transition of the Cost of Quality in Procurement project. An Agile Logistics for Acquisition and Regulated Materials Project will be initiated. Additionally, new efforts will begin to improve the acquisition of 3D technical data during provisioning and to assess the potential impact of a standards-based approach to simplify approval of substitute alloys. Additional new projects will be awarded as a result of collaborative planning efforts during FY16. Collaborative efforts will be continued with the Procurement and T/Q Process Owners and their teams to develop new projects for FY 2017 awards. Medical Processes will continue to execute projects that support ACCM. Additionally, a new project in Medical 3D Printing could be undertaken this year. Strategic Distribution and Disposition (SDD) will support the Distribution Modernization Program as necessary to identify, evaluate, and test disruptive technologies and continue with forklift battery projects in support of DLA Distribution. ***FY 2018 Plans:*** WSS will begin an initiative to work with DLA's Center of Planning Excellence (CoPE) for co-experimentation and innovation to improve planning processes. WSS efforts initiated in FY17 will be continued or completed, and transition activities initiated where appropriate. Potential projects under development include Improving the Solicitation Process, Commercially available Parts, and Warfighter Impact-Based Parts Support.			
Accomplishments/Planned Programs Subtotals	5.413	5.236	3.849

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 9 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9: *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*	0.000	6.209	3.404	2.700	-	2.700	2.776	2.868	2.948	3.009	Continuing	Continuing

A. Mission Description and Budget Item Justification

Emergent Logistics R&D Strategic Focus Area includes R&D efforts to develop new products and services for DLA customers. The Energy Roadmap helps to achieve the operational energy strategy goals of increasing sources of supply, developing and implementing alternative fuels under the Energy Readiness Program (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 2016	FY 2017	FY 2018
Title: Emergent Logistics R&D Requirements	6.209	3.404	2.700
FY 2016 Accomplishments: Supply Chain Management continued to fund the exploration of 2 areas, Additive Manufacturing and Sourcing Ultra High Modulus Carbon Fiber, to allow DLA to get a head start on the technological advantages it offers without disrupting ongoing programs. DLA Additive Manufacturing (AM) partnered with the Military Services to accelerate product realization methods for AM producing parts. For Ultra-High Modulus Carbon Fiber, DLA completed materials characterization and qualification of a domestically produced, ultra-high modulus, carbon fiber system for Defense and National Security space systems in order to mitigate the supply chain costs and risks of this strategic material. ERP continued to focus on providing additional alternatives for military unique fuels, working with the Service customers to improve specifications and standards for fuel quality, engaging in modeling and simulation of the energy supply chain and identifying alternative energy sources for Military Customers.			
FY 2017 Plans: Supply Chain Management addresses 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			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 9 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
benefits of implementing new technology sooner than would otherwise be the case and maintain continuity of funding and activity for baseline programs. DLA and the Military Services will identify lists of candidate parts for AM to be used for vendor solicitation. DLA R&D has established AM Memorandums of Agreement (MOA) with Naval Sea Systems Command (NAVSEA), Naval Air Systems Command (NAVAIR), and U.S. Army Research, Development and Engineering Command (RDECOM), and currently developing MOAS with Kansas City National Security Campus (KCNSC), Air Force Materiel Command (AFMC) and Marine Corps Systems Command (MARCORSYSCOM). These MOAs will allow the Agency to begin the transition of AM as a new alternative into its procurements activities. Energy Readiness 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. ***FY 2018 Plans:*** 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. Augmented reality is an emerging technology that has potential to advance to the forefront. 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. 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. 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.			
Accomplishments/Planned Programs Subtotals	6.209	3.404	2.700

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603712S / *Generic Logistics R&D Technology Demonstrations (Log R&D)*	**Project (Number/Name)** 9 / *Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency											Date: May 2017	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*					R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	145.998	29.888	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	175.886
1: *Capabilities Based Logistics*	7.342	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.342
2: *Deployment and Distribution Velocity Management*	6.869	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.869
3: *Cross Domain Intuitive Planning*	2.408	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.408
4: *End-to-End Visibility*	6.639	0.400	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.039
5: *Distribution Planning and Forecasting*	8.504	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.504
6: *Joint Transportation Interface*	14.917	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.917
7: *Distribution Protection/Safety/ Security*	15.135	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.135
8: *Command and Control/ Optimization/Modeling and Simulation*	57.459	16.492	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	73.951
9: *Cyber*	5.780	5.436	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.216
10: *Global Access*	20.945	7.560	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	28.505

Note

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-

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603713S *I Deployment and Distribution Enterprise Technology*

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.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	29.888	0.000	0.000	-	0.000
Current President's Budget	29.888	0.000	0.000	-	0.000
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

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.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 1 / *Capabilities Based Logistics*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *Capabilities Based Logistics*	7.342	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.342

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Capabilities Based Logistics	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Critical enterprise-level distribution system capabilities to improve DOD supply chain performance. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 2 / *Deployment and Distribution Velocity Management*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
2: *Deployment and Distribution Velocity Management*	6.869	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.869

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Deployment and Distribution Velocity Management	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Increase force projection and sustainment velocity. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 3 / *Cross Domain Intuitive Planning*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
3: *Cross Domain Intuitive Planning*	2.408	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	2.408

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Cross Domain Intuitive Planning	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Improve decision-making and collaboration within the supply chain and focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 4 / *End-to-End Visibility*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
4: *End-to-End Visibility*	6.639	0.400	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	7.039

Note

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

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 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: End-to-End Visibility	0.400	-	-
FY 2016 Accomplishments: Completed the development of an advanced predictive forecasting capability for better visibility and forecasting of Class IX (spare parts) demands, anticipated lift needs, and established / measured lift priorities in terms of the operational availability implications of those demands on planned military operations.			
Accomplishments/Planned Programs Subtotals	0.400	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603713S / *Deployment and Distribution Enterprise Technology*	**Project (Number/Name)** 4 / *End-to-End Visibility*

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions/success are monitored against schedules and deliverables stated in the statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity. Ability to enhance the effectiveness and efficiency of DoD logistics/supply chain operations.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 5 / *Distribution Planning and Forecasting*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
5: *Distribution Planning and Forecasting*	8.504	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	8.504

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Distribution Planning and Forecasting	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Planning based on an understanding of customer requirements for optimizing the distribution process. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 6 / *Joint Transportation Interface*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
6: *Joint Transportation Interface*	14.917	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	14.917

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Joint Transportation Interface	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Synchronizing, through information exchange, strategic/theater delivery capabilities to meet warfighter needs. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 7 / *Distribution Protection/Safety/Security*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
7: *Distribution Protection/Safety/ Security*	15.135	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	15.135

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY2013 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Distribution Protection/Safety/Security	0.000	-	-
FY 2016 Accomplishments: N/A			
Accomplishments/Planned Programs Subtotals	0.000	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 8 / *Command and Control/Optimization/ Modeling and Simulation*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
8: *Command and Control/ Optimization/Modeling and Simulation*	57.459	16.492	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	73.951

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Command and Control/Optimization/Modeling and Simulation	16.492	0.000	-
FY 2016 Accomplishments: Began a comprehensive account of strategies, optional implementations & recommendations for enterprise-wide management of metadata. Continued the development of robust modeling solutions in the face of uncertainty, provided the capability to model detailed enhanced business rules without major “surgery” or software development, and provided the ability to utilize sub-network modeling to streamline the modeling and analysis process. Continued effort to provide ability to rapidly develop, assess, adapt, and execute plans in a dynamic environment. Continued partnership with Air Force Institute of Technology to develop Modeling and Simulation Decision Support technologies. Continued partnership with Lincoln Labs for information technology system integration and prototype development. Continued effort to increase shared awareness, operational agility and optimize the use of the active duty AR fleet, during the short notice planning process, from a worldwide/fleet-wide perspective, as well as providing the ability to plan, if desired, using allied/coalition/international AR aircraft to refuel DoD aircraft. Continued the effort to develop the ability to effectively and efficiently schedule missions from all known sources of airlift requirements. Completed effort to plan and executing theater distribution of fuel and water. Completed effort to identify ways, at military installation Entry Control Facilities, to reduce threat vehicle speeds and mitigate or defeat the threat through design changes. Completed effort to plan and executing theater distribution of fuel and water.			
FY 2017 Plans:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603713S / *Deployment and Distribution Enterprise Technology*	**Project (Number/Name)** 8 / *Command and Control/Optimization/ Modeling and Simulation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
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.			
Accomplishments/Planned Programs Subtotals	16.492	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions/success are monitored against schedules and deliverables stated in the statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity. Ability to enhance the effectiveness and efficiency of DoD logistics/supply chain operations.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 9 / *Cyber*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9: *Cyber*	5.780	5.436	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	11.216

Note

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 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Cyber	5.436	0.000	-
FY 2016 Accomplishments: Continued development of a prototype custom attribute solution with extensive documentation for open standards based identity providers. Continued effort to identify and tailor best business practices, process improvement, knowledge management, and technology transition to operationalize cyber security. Continued partnership with Massachusetts Institute of Technology Lincoln Labs in developing cyber secure enclave. Completed development and delivery of a set of services that will enable USTRANSCOM to recognize disruptive events or potential disruptive events, understand their impact, determine a response as well as choose and implement the response that best balances addressing the cyber threat while minimizing mission impact.			
FY 2017 Plans: 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.			
Accomplishments/Planned Programs Subtotals	5.436	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603713S / *Deployment and Distribution Enterprise Technology*	**Project (Number/Name)** 9 / *Cyber*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions/success are monitored against schedules and deliverables stated in the statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity. Ability to enhance the effectiveness and efficiency of DoD logistics/supply chain operations.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S / *Deployment and Distribution Enterprise Technology*	Project (Number/Name) 10 / *Global Access*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
10: *Global Access*	20.945	7.560	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	28.505

Note

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

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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Global Access	7.560	0.000	-
FY 2016 Accomplishments: Began building a prototype modular petroleum pumping system that will provide a development path for Navy/USMC ship-to-shore technology. Began development and integration of Large Aircraft Infrared Countermeasures (LAIRCM) Enhanced Situational Awareness capability. Started development of a capability to rapidly assess degraded/damaged ports in strategic locations. Began effort to develop precision, on-demand air drop resupply of small units in remote/austere locations based on request from unit in need. Commenced effort to provide visual/guidance technologies to use when global positioning systems are not available. Completed development of an operational prototype real-time monitoring and display system of local wave/current/wind conditions. Completed effort to deliver an appliqué system that can be added onto currently fielded Rough Terrain Cargo Handlers. Completed effort to remotely access and retrieve containers and vehicles at sea.			
FY 2017 Plans: 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.			
Accomplishments/Planned Programs Subtotals	7.560	0.000	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603713S / *Deployment and Distribution Enterprise Technology*	**Project (Number/Name)** 10 / *Global Access*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions/success are monitored against schedules and deliverables stated in the proposals and statements of work. >80% transition rate of proven technologies to increase force projection and sustainment velocity. Ability to enhance the effectiveness and efficiency of DoD logistics/supply chain operations.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	305.434	86.832	97.826	219.803	-	219.803	99.734	101.218	102.613	104.699	Continuing	Continuing
1: *Technology Development*	179.009	37.659	44.912	133.074	-	133.074	46.971	47.886	48.789	49.785	Continuing	Continuing
2: *Trusted Foundry*	126.425	49.173	52.914	86.729	-	86.729	52.763	53.332	53.824	54.914	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Department has found 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 is a critical capability in an atmosphere of diminishing domestic semiconductor manufacturing capability and increasing worldwide supply chain risks with threats to defense microelectronics. These threats 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, their extended combat use increases attrition and the need for DMEA's unique capabilities increases.

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. As such, 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.

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's knowledge of varying military requirements across a broad and diverse range of combatant environments and missions – along with its unique technical perspective – allows it to develop, manage and implement novel microelectronic solutions to enhance mission capability. DMEA then 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's capabilities make it a key tool in the intelligent and rapid development and application of advanced technologies to identified military needs.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603720S *I Microelectronics Technology Development and Support (DMEA)*

Working alongside industry, DMEA has created a model partnership that provides this capability for the Department. 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.

These Government-held licenses allow for the transfer to DMEA of industry-developed intellectual property (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 in an industry partner 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.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	89.038	97.826	98.694	-	98.694
Current President's Budget	86.832	97.826	219.803	-	219.803
Total Adjustments	-2.206	0.000	121.109	-	121.109
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-2.206	-			
• Pay Increase Adjustment	-	-	0.109	-	0.109
• Program Increase	-	-	121.000	-	121.000

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 3: *Advanced Technology Development (ATD)*	**R-1 Program Element (Number/Name)** PE 0603720S *I Microelectronics Technology Development and Support (DMEA)*

Congressional Add Details ($ in Millions, and Includes General Reductions)	FY 2016	FY 2017
Project: 2: *Trusted Foundry*		
Congressional Add: *Trusted Source Implementation of Field Programmable Gate Arrays Study*	10.000	-
Congressional Add Subtotals for Project: 2	10.000	-
Congressional Add Totals for all Projects	10.000	-

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. BASE: FY17PB ($97.826M) + Request for Additional Appropriations ($0.000M).

PB18 program increase for the top four FY2018 microelectronics initiatives, including access to the GlobalFoundries 14 nm foundry, development of secure chip design environments, procurement of foundry process intellectual property, and assured field-programmable gate arrays.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	Project (Number/Name) 1 / *Technology Development*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *Technology Development*	179.009	37.659	44.912	133.074	-	133.074	46.971	47.886	48.789	49.785	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. 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 within the Department 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 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 keep pace with 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 a National Critical Asset.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Technology Development Accomplishments/Plans	37.659	44.912	133.074
FY 2016 Accomplishments: DMEA designed, developed, and demonstrated microelectronics concepts, advanced technologies, and applications to solve operational problems. DMEA applied advanced technologies to add performance enhancements in response to the newest asymmetric threats and to modernize aging weapon systems. In FY16 DMEA worked 256 tasks (Army 24%, Navy/Marines 27%, AF 33%, Other DoD 11%, and Non-DoD 5%) totaling $1.29B and resulting in over $540M of cost avoidance/savings. Examples			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 1 / *Technology Development*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
of cost avoidance include $106M for the C-5 Data Transfer Device, $200M for the Counter-Rocket, Artillery and Mortar System and $40M for the HH-60G Pave Hawk Helicopter. In keeping with the rapid pace of microelectronics technology, DMEA continued the process of extending its fabrication capability to smaller node sizes. DMEA started installation of the cleanroom in the 200mm facility. ***FY 2017 Plans:*** DMEA will continue to 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 continue to add capacity and capability by recapitalizing and modernizing aging microelectronic infrastructure, continue the installation of the cleanroom in the 200mm facility, extend and upgrade process IP, develop advanced techniques to inspect and analyze circuits, and adapt tools and processes to detect increasingly sophisticated counterfeit microelectronics. DMEA estimates it will work over 260 tasks in 2017 valued at approximately $1.5B. The anticipated distribution by Component is Army 28%, Navy/Marines 27%, AF 33%, Other DoD 10%, and non-DoD 3%. ***FY 2018 Plans:*** DMEA will continue to 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 continue to 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.			
Accomplishments/Planned Programs Subtotals	37.659	44.912	133.074

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 1 / *Technology Development*

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	Project (Number/Name) 2 / *Trusted Foundry*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
2: *Trusted Foundry*	126.425	49.173	52.914	86.729	-	86.729	52.763	53.332	53.824	54.914	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Department and the National Security Agency (NSA) 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 tampered or sabotaged parts. Worldwide competition from foreign, state-subsidized manufacturing facilities continues to greatly reduce the number of U.S. semiconductor fabrication facilities that might 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 as illustrated by the recent acquisition of IBM's semiconductor manufacturing capability by GlobalFoundries. This acquisition, caused by economic pressures, has again highlighted the fact that 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. This trend is of acute concern to the defense and intelligence communities. Secure communications and cryptographic applications, among other areas of defense interest, depend heavily upon high performance semiconductors where a generation of improvement can translate into a significant force multiplier and capability advantage. 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 Microelectronics program provides the Department with access to the Trusted state-of-the-art microelectronics design and manufacturing capabilities necessary to meet their confidentiality, integrity, availability, performance and delivery needs. The program also provides the Services 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 focus on fostering all viable alternatives to continue the vital supply of Trusted and assured 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, Trusted Microelectronics access is absolutely necessary to meet secure communication and cryptographic needs requiring state-of-the-art semiconductor technologies.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Trusted Foundry	39.173	52.914	86.729
FY 2016 Accomplishments: Completed the transition of Trusted Access Program Office responsibility from NSA to DMEA, including the award of key contracts to ensure uninterrupted Trusted access to state-of-the-art semiconductor technology. Enhanced the cadre of trusted suppliers for the critical trusted components and services needed for appropriate defense systems. Enhanced Trusted Microelectronics			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 2 / *Trusted Foundry*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
products to include newly available leading edge technologies and other key specialty processes required by Department programs. Expanded a line of trusted catalog components that can be purchased by Defense contractors. Continued activities to ensure the Department has Trusted Access to leading edge semiconductor technologies. Continued the development of a capability for the inspection and analysis of application-specific integrated circuits (ASICs) and refined the utilized methods for efficiency, accuracy, and applicability to multiple processes. ***FY 2017 Plans:*** Continue facilitating the availability of Trusted state-of-the-art semiconductor technology to DoD weapon system programs and research organizations through the DMEA Trusted Access Program office contracts. Continue the development of new capabilities for the inspection and analysis of application-specific integrated circuits (ASICs) and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes. 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 efforts to facilitate the availability of Trusted field-programmable gate arrays (FPGAs), and complete related technology development efforts. Continue the development of a capability for the inspection and analysis of application-specific integrated circuits (ASICs) and refined the utilized methods for efficiency, accuracy, and applicability to multiple processes. ***FY 2018 Plans:*** Continue facilitating the availability of Trusted state-of-the-art semiconductor technology to DoD weapon system programs and research organizations through the DMEA Trusted Access Program office contracts. 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 a capability for the inspection and analysis of application-specific integrated circuits (ASICs) and continuously refine the utilized methods for efficiency, accuracy, and applicability to multiple processes.			
Accomplishments/Planned Programs Subtotals	39.173	52.914	86.729

	FY 2016	FY 2017
Congressional Add: Trusted Source Implementation of Field Programmable Gate Arrays Study	10.000	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 3	**R-1 Program Element (Number/Name)** PE 0603720S / *Microelectronics Technology Development and Support (DMEA)*	**Project (Number/Name)** 2 / *Trusted Foundry*

	FY 2016	FY 2017
FY 2016 Accomplishments: DMEA began implementation of promising aspects from the Trusted Field Programmable Gate Arrays (FPGAs) Study to further efforts to produce an FPGA in an acceptable Trusted manufacturing flow.		
Congressional Adds Subtotals	10.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

N/A

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	76.178	11.501	5.660	6.266	-	6.266	3.200	2.400	1.500	0.750	Continuing	Continuing
4: *Defense Information System for Security (DISS)*	62.020	8.299	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	70.319
9: *Enterprise Funds Distribution (EFD)*	14.158	3.202	5.660	6.266	-	6.266	3.200	2.400	1.500	0.750	Continuing	Continuing
11: *Next Generation Resource Management System (NGRMS)*	0.000	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	11.912	12.631	12.639	-	12.639
Current President's Budget	11.501	5.660	6.266	-	6.266
Total Adjustments	-0.411	-6.971	-6.373	-	-6.373
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.411	-			
• EFD Phase II Development & Deployment	-	-	0.620	-	0.620
• PB17 Amended Program Increase	-	1.860	-	-	-
• NGRMS Sunset	-	-8.831	-8.853	-	-8.853
• PB18 Program Increase - EFD	-	-	1.860	-	1.860

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution.

EFD Base: FY17PB ($3.800M) + Request for Additional Appropriations ($1.860M required to address emergency warfighter readiness. Funds are in support of the RDT&E Project Enterprise Funds Distribution (EFD) Phase 2 Design, Development, and Deployment. These funds are needed to ensure continued on time development and software upgrades for EFD capability, specifically the SFIS/GL requirements required by 30 September 2017 to support DOD Audit compliance mandate. Additionally, these funds are needed to ensure remaining Phase 2 requirements are designed/deployed on time to eliminate on going excessive parallel data entry operations required from the DOD EFD user community. Such operations jeopardize data integrity and negatively impact audit readiness preparation efforts.)

NGRMS Base: FY17PB ($8.831M) + Request for Additional Appropriations (-$8.831M realigned for NGRMS from the Defense Logistics Agency to OSD to align funding with the program office for more efficient execution.)

PB18 NGRMS was removed across the FYDP as the program has been fully sunsetted. Some of the NGRMS was omnibus reprogrammed to Enterprise Funds Distribution (EFD).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 4 / *Defense Information System for Security (DISS)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
4: *Defense Information System for Security (DISS)*	62.020	8.299	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	70.319
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Defense Information System for Security (DISS) is a systems solution that specifically addresses the security clearance and suitability adjudicative requirements of Section 3001 of Public Law 108-458, the Intelligence Reform and Terrorism Prevention Act of 2004 (IRTPA) and the Joint Reform Team's Security and Suitability Process Reform Strategic Framework as published in February 2010 which requires 90% of all clearances - whether Top Secret, Secret, or Confidential - to be completed within 60 days. The first 40 days is to complete the investigative phase and the remaining 20 days is to complete the adjudicative phase of the clearance review. In addition to national security clearance determinations, DISS supports Suitability and Homeland Security Presidential Directive 12 (HSPD-12) credentialing eligibility compliance across the Department of Defense (DoD). The DISS will electronically collect, review, and share relevant data, government-wide, as mandated by the IRTPA and, guided by relevant Executive Orders, Congress, and Government Accountability Office (GAO) recommendations, deliver and maintain an appropriately vetted world-class workforce.

The DISS is comprised of two key application components: the Case Adjudication Tracking System (CATS) and the Joint Verification System (JVS). Currently, CATS is deployed in multiple versions (V1-V3) at the DoD Central Adjudication Facility (CAF); whereas the CATS component of DISS will upgrade CATS (V1-V3) technology stack and consolidate capabilities into a single baseline in FY2017. CATS (V1-V3) are operational fulfilling the requirements to receive background investigations and adjudicate national security, suitability and HSPD12 credentialing eligibility determinations via electronic and human adjudication processes. Historically, CATS electronically rendered favorable adjudicative decisions for approximately 24% of Secret-level cases. New Tier 3 e-Adjudication business rules for access to Secret information were approved in September 2016. JVS will be used by the security management community to manage subject's access to information based on eligibility, communicate with the CAF, manage subject incidents, and additional subject details such as reporting, travel, and relationships. The DISS will incrementally deploy additional capabilities to address functionality gaps between DISS and the Joint Personnel Adjudication System (JPAS). DISS will enable consistent standards throughout the collateral DoD Personnel Security, Suitability and HSPD12 mission areas. CATS (V1-V3) instances and JPAS, once fully replaced by DISS, will be decommissioned. JPAS is projected to be decommissioned in FY2019 but this may be adjusted based upon DISS deployments.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Defense Information System for Security (DISS)	8.299	-	-
Description: The DISS CATS has been designated as the DoD non-Intelligence Community IT system for case management and adjudications by the 10 April 2009 USD(I) memo “Designation of the DoD Case Management and Adjudication Systems.” Currently, CATS processes over 500,000 cases annually; electronically producing favorable adjudicative decisions for approximately 24% of Secret level cases.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 4 / *Defense Information System for Security (DISS)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Further, the 3 May 2012 Deputy Secretary of Defense Memo "DoD Central Adjudication Facilities (CAF) Consolidation" consolidated all DoD CAF into one consolidated DoD CAF responsible for personnel security adjudicative functions as well as favorable Suitability and HSPD-12 adjudications. The DISS (CATS) is the DOD CAF's designated IT case management system. Achieving the above goals will significantly enhance the operational readiness of the national security community and the Federal government. It will decrease the time required to get an individual through the investigation process. It will strengthen and reinforce reciprocity throughout the federal community by eliminating redundant or incomplete investigations by standardizing adjudicative decisions and by making available to all agencies adjudicative determinations of the Federal government. ***FY 2016 Accomplishments:*** • Completed Seaside, CA Phase I infrastructure build in preparation for Washington Headquarter Services (WHS) Go-Live • OPM tiered case ingest successfully tested across all Legacy CATS versions • Developed DISS Portal training artifacts • Received final draft DISS hierarchy structures for the Components and WHS • Completed End User Evaluation (EUE) • System categorized and security controls identified • The DISS System of Record Notice (SoRN) was promulgated			
Accomplishments/Planned Programs Subtotals	8.299	-	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

On May 09, 2013, the DISS CATS received a Full Deployment (FD) Acquisition Decision Memorandum (ADM) which acknowledged that CATS was operationally fielded at the five adjudication facilities and authorized the DISS PMO to enhance and field a consolidated CATS (CATS v4) and its associated portal in order to improve the lifecycle management of the CATS by consolidating the existing CATS applications into a consolidated CATS application that uses a single database. The July 11, 2014 "DISS Acquisition Strategy Revision Acquisition Decision Memorandum" revised the DISS acquisition strategy to field the remaining JVS capability not contained in the CATS. The JVS Milestone B Acquisition Decision Memorandum (ADM) was signed in FY15 Q2 and this initiated the Engineering Development phase in which the program will refine system requirements, configure the software, build functionality, conduct developmental testing, and plan for operational testing. These activities will continue until a Full Deployment Decision (FDD) is made.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 4 / *Defense Information System for Security (DISS)*

The DISS PMO is responsible for program execution and will employ contract types as directed by the agency contracts policies in order to support the delivery and sustainment of the DISS Capabilities. DISS development contractors employ an agile development methodology to allow for a flexible approach that incorporates user requirements and feedback throughout the development lifecycle while meeting delivery requirements as prescribed by the associated development contract. The Agile development methodology allows for the fielding of incremental capabilities IAW the program's acquisition approach.

E. Performance Metrics

N / A

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	Project (Number/Name) 9 / *Enterprise Funds Distribution (EFD)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9: *Enterprise Funds Distribution (EFD)*	14.158	3.202	5.660	6.266	-	6.266	3.200	2.400	1.500	0.750	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 2016	FY 2017	FY 2018
Title: Enterprise Funds Distribution (EFD)	3.202	5.660	6.266
Description: EFD will distribute funds to the Military Departments and the Defense Agencies.			
FY 2016 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 9 / *Enterprise Funds Distribution (EFD)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Implemented onto EFD the BRAC and non-general fund accounts (such as Special, Trust, Revolving, and Deposit funds). The efforts for implementation include requirements review, functional and technical analysis, system configuration/development, data conversion, and testing. • Provided training to the end users who are responsible for the BRAC and non-general funds accounts. • Conducted transition activities in preparation for DFAS to sustain the system. • Converted the funding data for years prior to FY16 for the Defense Organizations that were implemented onto EFD as part of the Phase 2 efforts. • Deployed Software upgrade Momentum 7.3 to current user base. ***FY 2017 Plans:*** • Begin implementation of core EFD Phase 2 functionality and determine user group migration strategy. • Determine strategy for development and deployment of remainder of requirements aligned with user group migration. • ***FY 2018 Plans:*** • Continue development and deployment of EFD Phase 2 requirements based on user group migration strategy.			
Accomplishments/Planned Programs Subtotals	3.202	5.660	6.266

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-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	Project (Number/Name) 11 / *Next Generation Resource Management System (NGRMS)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
11: *Next Generation Resource Management System (NGRMS)*	0.000	0.000	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Department's budget focuses on institutionalizing and financing our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead, while at the same time mitigating risk and providing for contingency operations. It also includes a fundamental overhaul of the DoD's approach to procurement, acquisition, and contracting. As such, the complex details of budgeting and tracking of funds become increasingly critical to senior leader decision making and to provide accountability to the taxpayer. Incorporating information technology toward current and emerging business processes manifesting into a state-of-the art system of systems will result in increasing efficiencies, timely diagnostics, and reducing lifecycle costs to maintain, sustain and repair.

Today, the Office of the Under Secretary of Defense Comptroller OUSD(C) and the Cost Analysis and Program Evaluation (CAPE) use various distinct automated systems (Comptroller Information System (CIS), Program Resource Collection Process (PRCP), Supplemental Resource Collection Process (SRCP), Budget Exhibits Generator and Standard Data Collection System (SDCS)) to formulate, justify, and execute DoD budgets. These six or more systems interact with at least several computer-based systems controlled by external organizations and agencies. These systems manage very similar financial information, yet each uses its own scheme for representing information. Much of the information managed by these systems is redundant. Cross-system data representations and redundancies make it difficult to exchange and to reconcile information. The capabilities provided by Comptroller systems, in some cases, fail to deliver services needed by its users, or fail to operate in ways that complement current and emerging business practices. They fail to give executives information in a comprehensible form, making it difficult to draw conclusions. Data disparities and functional redundancy make these systems more costly to maintain than they need to be.

There is a critical need for the development of a state-of-the-art information technology system to modernize and replace multiple, antiquated legacy systems and processes used to formulate, justify, present and defend the entire Department of Defense Budget in the Office of the Under Secretary of Defense (Comptroller) (OUSD(C)) to meet Title 10 and Title 31 mission and reporting requirements. The Comptroller's plan for mitigating the deficiencies and capability gaps associated with current systems is development of the Next Generation Resource Management System.

This initiative exploits emerging technology, processes, trends, capabilities, and techniques to incorporate state-of-the-art information technology enabling the ability, agility, and level of fidelity to collect, process, administer and report resource management data and to automate business processes within a more robust analytical environment within the Office of the Under Secretary of Defense (Comptroller) OUSD(C). Funded efforts will improve the timeliness of resource management reviews and decisions for senior leaders and Congress.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Next Generation Resource Management Service (NGRMS)	0.000	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605070S / *DoD Enterprise Systems Development and Demonstration*	**Project (Number/Name)** 11 / *Next Generation Resource Management System (NGRMS)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
FY 2016 Accomplishments: N/A. This program is currently being managed by OSD(C) and will be transferred to DLA in FY 2017. ***FY 2017 Plans:*** AMENDED BUDGET REQUEST JUSTIFICATION: FY17 OMNIBUS Reprogramming: -$8.831 million is realigned for NGRMS from the Defense Logistics Agency to OSD to align funding with the program office for more efficient execution. ***FY 2018 Plans:*** Historical data migration from the legacy systems, development and deployment of integrated program budget submission capability (increment 2.0), and requirements development for increment 3.0			
Accomplishments/Planned Programs Subtotals	0.000	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Milestone C for Increment 2.0 3Q FY2017
Full Deployment Decision (FDD) for Increment 2.0 3Q FY2017
Increment 3.0 development and acceptance 3Q FY 2017 - 3Q FY 2018
Increment 4.0 development and acceptance 3Q FY 2018 – 2Q FY 2020

E. Performance Metrics

N/A.

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605080S *I Defense Agency Initiatives (DAI) - Financial System*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	79.757	30.568	30.457	24.436	-	24.436	40.300	2.899	1.923	25.567	Continuing	Continuing
1: *Defense Agency Initiatives (DAI) - Financial System)*	79.757	30.568	30.457	24.436	-	24.436	40.300	2.899	1.923	25.567	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) Increment 2, an Acquisition Category I program. Previous funding for DAI, Increment 1, was documented in the Defense Enterprise Business Systems program element 0605070S, as well as, FY2013 4th Quarter Increment 2.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	31.660	26.657	3.836	-	3.836
Current President's Budget	30.568	30.457	24.436	-	24.436
Total Adjustments	-1.092	3.800	20.600	-	20.600
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-1.092	-			
• DAI Increment 3	-	-	20.600	-	20.600
• PB17 Amendment Increase	-	3.800	-	-	-

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. Base: FY17PB ($26.657M) + Request for Additional Appropriations ($3.800M required to address emergency warfighter readiness. Funds are in support of the production environment for new agencies and meet the additional vendor software server requirements as DAI updates the other portions of the DAI Suite including, Operating system upgrade, Oracle Business Intelligence Enterprise Edition, and other applications/utilities to maintain currency with support. The increases will largely support Washington Headquarters Services and supported agencies. The data volume for WHS is roughly three times the volume of the largest DAI deployed agencies. Additionally, the growth in the number and size of attachments has resulted in higher storage requirements. This funding will also support additional equipment and services from Defense Information Systems Agency's Defense Enterprise Computing Center Ogden, UT.)

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605080S *I Defense Agency Initiatives (DAI) - Financial System*

PB18 increase in funding to complete development efforts.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency											Date: May 2017	
Appropriation/Budget Activity 0400 / 5					R-1 Program Element (Number/Name) PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*				Project (Number/Name) 1 / *Defense Agency Initiatives (DAI) - Financial System)*			
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
1: *Defense Agency Initiatives (DAI) - Financial System)*	79.757	30.568	30.457	24.436	-	24.436	40.300	2.899	1.923	25.567	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 more than 10 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 12.2.3 (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: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - 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 20 Defense Agencies and the Office of the Under Secretary of Defense, Comptroller, (OUSD(C)) (Time and Labor only) and supporting over 29,990 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.

The benefits of DAI are:
- Common business processes and Enterprise data standards (i.e., SFIS and SLOA);
- 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. While the DAI PMO serves as systems integrator, niche activities; i.e. P2P, development, are contracted.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Defense Agency Initiatives (DAI) - Financial System	30.568	30.457	24.436
FY 2016 Accomplishments: In FY2016, the PMO will:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Conducted a service provider, independent audit, SSSAE 16 and support the Audit Readiness Office in developing service provider assertion packages supporting the SSAE 16 SOC 1 Report and resolve any Notification of Findings (NOFs). The DAI PMO will use the DECCs SSAE 16 SOC 1 Report as the basis for its input for the annual DLA SOC 1 Report that Agencies will use in their audits. DECCs maintain all the operations software and hardware in the suite. • Conducted BEA compliance assessment against the current version (v10.0 as of September 8, 2015), document results in the Department's Integrated Business Framework – Data Alignment Portal (IBF-DAP) portal and conduct Business Process Re-engineering for Rel 4 and October 2017 deploying Defense Agencies. • Resolved critical software errors and critical statutory/regulatory enhancements that impact operations and incorporate changes identified during BPR, BEA compliance assessment and the Audit generated corrective action plans. • Supported the DoD Information Assurance Certification and Accreditation Process (DIACAP)/ Risk Management Framework (RMF) process maintaining activity to support actions included in the DAA required POA&M including an independent FISCAM Test of Design/Test of Effectiveness. The submission package will result in a DAA decision to award an ATO. • Conducted testing to include: unit testing on developed items; monthly Rel testing that includes regression; annual Rel development testing that includes a SIT and UAT; Rel 3 developmental testing including a SIT and UAT; as well as an operational assessment event in conjunction with DOT&E following the annual Rel at using Defense Agencies. • Conducted contract renewal competitions and exercise options on existing contracts and monitor contractor performance and billing. • Deployed Rel 2 to some of the October 2017 deploying Defense Agencies' for Time and Labor. • Conducted October 2017 deploying Defense Agencies' implementation activities including data conversion, BPR and workforce preparation. • Continued the implementation of GRC capabilities delivered in Rel 2. • Developed Rel 3 Budget Formulation and Direct Treasury Disbursing capabilities, DAI Configuration Control Working Group (CCWG) approved changes and develop ability to send/receive the Department's Purchase Request and Procurement Data Standards (PRDS/PDS). • Conducted an annual Acquisition In-Process Review (IPR) with the MDA. • Oversaw the operations of the DISA DECCs at Ogden, UT (Production and T&D to include training) and Columbus, OH (COOP). The PMO operates database servers, application servers and web servers, leveraging the DECC for infrastructure support and host site related IA and internal controls. DECC services are governed by an annually negotiated Service Level Agreement (SLA). • Maintained currency with existing Federal, DFAS and target Enterprise systems including the System for Award Management (SAM) web services, as SAM assumes the functionality of the Federal Integrated Acquisition Environment (IAE) systems. • Maintained a sufficient Information Assurance/cybersecurity posture and support the DIACAP/ RMF process maintaining activity to support actions included in the Designated Approval Authority required actions included in the POA&M including maintaining currency of documentation in Enterprise Mission Assurance Support Service (EMASS) portal. This includes maintaining the operational and application software currency and security patches.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Maintained DAI master data leveraging feeds from the authoritative data sources. • Maintained the program's DODAF views in accordance with DLA guidance and in DLA systems. • Ensured sufficient administer all of the databases: production; T&D/training; and COOP. • Maintained the system configuration in accordance with the DLA J6 Enterprise Configuration Management Plan (ECMP) and DAI CCWG. • Maintained currency with functional policy with regard to function and data standards. • Maintained the technical side of the system including the internal processes and the operation of several interfaces with external systems leveraging DLA Transaction Services as well as established Federal Enterprise system web services. • Maintained and monitor user roles and responsibilities at the system level and guide using Agencies at the Component level. • Obtained an ATO and Interoperability Certification. .			
FY 2017 Plans: In FY 2017, the DAI PMO will • Deploy Rel 3 to current Defense Agencies and to full financial capabilities to Defense Security Cooperation Agency, DoD Inspector General, Director of Operational Test & Evaluation, Defense Information Systems Agency (General Fund) and Defense Human Resources Activity. • DAI PMO will develop Rel 4 Re-Sale Accounting and Defense Working Capital Fund accounting, work instructions, training materials as well as any necessary RICE-FW objects. • Conduct pre-Rel 4 deployment planning and BPR, with new Agencies, Rel 3 Agency mocks and Rel 4 SE technical reviews. • Conduct a service provider, independent audit, SSSAE 18 and support the Audit Readiness Office in developing service provider assertion packages supporting the SSAE 18 Service SOC 1 Report and resolve any identified NOFs. • The DAI PMO will use the DECCs SSAE 18 SOC 1 Report as the basis for its input for the annual DLA SOC 1 Report that Agencies will use in their audits. DECCs maintain all the operations software and hardware in the suite. • Conduct BEA compliance assessment against the current version (v10.0 as of September 8, 2015), document results in the Department's IBF-DAP portal and conduct Business Process Re-engineering for newly joining Defense Agencies. • Resolve critical software errors and critical statutory/regulatory enhancements that impact operations and incorporate changes identified during BPR, BEA compliance assessment and the Audit generated corrective action plans. • Support the DIACAP/RMF process maintaining activity to support actions included in the DAA required POA&M resulting in a DAA decision to award an ATO. • Conduct testing to include: unit testing on developed items; monthly Rel testing that includes regression; annual Rel development testing that includes a SIT and UAT; Rel 4 developmental testing including a SIT and UAT; as well as an operational assessment event in conjunction with DOT&E following the annual Rel at using Defense Agencies.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Conduct contract renewal competitions and exercise options on existing contracts and monitor contractor performance and billing. • Conduct October 2018 deploying Defense Agencies' implementation activities including data conversion, BPR and workforce preparation. • Continue the implementation of GRC capabilities delivered in Rel 2 based on audit feedback. • Develop, test and release Electronic Funds Distribution (EFD) to DAI production. • Conduct an annual Acquisition IPR with the MDA. • Oversee the operations of the DISA DECCs at Ogden, UT (Production and T&D to include training) and Columbus, OH (COOP). The PMO operates database servers, application servers and web servers, leveraging the DECC for infrastructure support and host site related IA and internal controls. DECC services are governed by an annually negotiated Service Level Agreement (SLA). • Maintain currency with existing Federal, DFAS and target Enterprise systems including the SAM web services, as SAM assumes the functionality of the Federal IAE systems. • Maintain a sufficient Information Assurance/cybersecurity posture and support the DIACAP/ RMF process maintaining activity to support actions included in the Designated Approval Authority required actions included in the POA&M including maintaining currency of documentation in EMASS. This includes maintaining the operational and application software currency and security patches. • Maintain DAI master data leveraging feeds from the authoritative data sources. • Maintain the program's DODAF views in accordance with DLA guidance and in DLA systems. • Ensure sufficient administer all of the databases: production; T&D/training; and COOP. • Maintain the system configuration in accordance with the DLA J6 ECMP and the DAI CCWG. • Maintain currency with functional policy with regard to function and data standards. • Maintain the technical side of the system including the internal processes and the operation of several interfaces with external systems leveraging DLA Transaction Services as well as established Federal Enterprise system web services. • Maintain and monitor user roles and responsibilities at the system level and guide using Agencies at the Component level. • Procure required hardware, software and licenses for new Agency's personnel. • Obtain an ATO and Interoperability Certification.			
FY 2018 Plans: In FY 2018, the DAI PMO will: • Field Increment 2 Rel 4 to users. • Development/Testing for DISA General Fund (GF) agency unique requirements and begin study/development of 4th Estate Defense Working Capital Fund (DWCF) capabilities. Study/develop Agency unique requirements for DeCA, including Independent Operational Assessment. • Work instructions and training materials.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Conduct Follow-on Test and Evaluation event with using Agencies which completes the cycle of independent operational assessments. • Support the FM & time/labor for over 49k users at over 23 Agencies, Field Activities and orgs. • Support the DoD Information Assurance Certification and Accreditation Risk Management Framework process to support actions included in the Designated Authorizing Authority required Plan of Actions and Milestones including an independent FISCAM Test of Design/Test of Effectiveness to result in a DAA decision to award an Authority to Operate. • Continue to implement the Governance, Risk and Compliance capabilities by expanding Enterprise controls: Configuration, Access, Prevention & Transactions supporting audit findings, recommendations & CAPs. • Maintain the technical operation including: application of DISA Security Technical Implementation Guides, HW & SW 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. • Conduct regular adversarial assessments, RMF continuous monitoring including code scans, an independent Cyber Economic Vulnerability Assessment and a Cooperative Vulnerability and Penetration Assessment. • Obtain or maintain an interim Interoperability Certification or an Authority to Connect to the DoD Global Information Grid. • The Program will also perform developmental, operational and Cyber security testing with independent third parties under Office of the Secretary of Defense oversight. The Defense Logistics Agency will contract for an independent public accounting firm to conduct the annual FFMIA and SSAE 18 assessments and conduct Cyber security assessments on the system.			
Accomplishments/Planned Programs Subtotals	30.568	30.457	24.436

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 will address the Commercial Off The Shelf (COTS) application upgrade. The upgrade was completed (January 2015); therefore, Increment 2 Rel 1 overwrote Increment 1 for all users.

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial 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:
* 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%.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

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:

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

-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

TASC, Inc.
Andover, MA
DISA Test and Development

CACI ISS, Inc

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

Fairfax, VA
Infrastructure Support

Terathink Corporation
Reston, VA
Data Conversion 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: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	Project (Number/Name) 1 / *Defense Agency Initiatives (DAI) - Financial System)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DAI Compliance Support	Option/ CPFF	CACI Inc Federal : Chantilly, VA	10.411	8.129	Jun 2016	7.792	Jun 2017	7.800	Jun 2018	0.000		7.800	Continuing	Continuing	-
DAI Implementation Support	Option/ CPAF	CACI Inc Federal : Chantilly, VA	13.511	2.089	Mar 2016	6.651	Mar 2017	6.510	Mar 2018	0.000		6.510	Continuing	Continuing	-
Infrastructure Support	Option/ FFP	CACI ISS Inc : Fairfax, VA	4.043	4.140	May 2016	3.472	May 2017	3.635	May 2018	0.000		3.635	Continuing	Continuing	-
Global Model CAD	C/CPFF	CSC : Falls Church, VA	3.205	0.000		-		-		-		-	0.000	3.205	-
Global Model P2P	C/FFP	IBM : Bethesda, MD	14.701	4.511	Aug 2016	3.745	Aug 2017	0.277	Aug 2018	0.000		0.277	Continuing	Continuing	-
Global Model A2R	C/CPFF	CACI Inc Federal : Chantilly, VA	6.412	2.600	Aug 2016	2.361	Aug 2017	0.398	Aug 2018	0.000		0.398	Continuing	Continuing	-
Data Conversion	Option/ FFP	Terathink : Reston, VA	1.664	0.848	Sep 2016	0.000		0.000		0.000		0.000	0	2.512	-
Jaws Professional Licenses	C/FFP	Immix : McLean, VA	0.017	0.000		0.000		0.000		0.000		0.000	0.000	0.017	-
Oracle Advanced Compression Licenses	TBD	TBD : TBD	0.000	1.622	Oct 2016	0.000		0.000		0.000		0.000	0.000	1.622	-
Oracle Contract Lifecycle Management licenses	C/FFP	Mythics Inc : Virginia Beach, VA	7.408	0.000		0.000		-		-		-	0.000	7.408	-
Oracle Licenses	MIPR	DISA : Pensacola,FL	5.446	0.000		1.000		-		-		-	0	6.446	-
Additional Memory	MIPR	DISA : Pensacola, FL	1.037	0.000		0.000		-		-		-	0	1.037	-
Kurzweil 5000 508 Assistive Tech Licenses	C/FFP	Envision Technology Inc : Bethesda, Md	0.008	-		-		-		-		-	0	0.008	-
Dragon Naturally Speaking 508	C/FFP	Red River Computer Co : Claremont, NH	0.007	-		-		-		-		-	0	0.007	-
Data Conversion	C/TBD	TBD : TBD	0.000	0.000		1.900	Sep 2017	0.945	Sep 2018	0.000		0.945	Continuing	Continuing	-
DISA/DITCO Delinquent Balance	MIPR	DISA DITCO : Scott AFB, IL	0.000	0.017	Aug 2016	-		-		-		-	0.000	0.017	-
DBTA Section 1553	MIPR	DFAS : Columbus, OH	0.000	0.377	Oct 2015	-		-		-		-	0.000	0.377	-

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	Project (Number/Name) 1 / *Defense Agency Initiatives (DAI) - Financial System)*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
GRC & BI Hardware	MIPR	DISA : Pensacola, FL	0.000	0.377	Oct 2015	-		-		-		-	0.000	0.377	-
OS Upgrade	MIPR	DISA : Pensacola, FL	0.000	0.108	Aug 2016	-		-		-		-	0.000	0.108	-
Dimensions RM Support Maintenance/ Tool	MIPR	DISA : Fort Meade, MD	0.660	0.216	Oct 2016	0.216	Oct 2017	0.227	Oct 2018	0.000		0.227	Continuing	Continuing	-
Oracle Linux Operating System Upgrade	MIPR	TBD : TBD	0.000	0.000		0.065	Oct 2016	0.068	Oct 2018	-		0.068	0.000	0.133	-
		Subtotal	68.530	25.034		27.202		19.860		0.000		19.860	-	-	-

Test and Evaluation ($ in Millions)

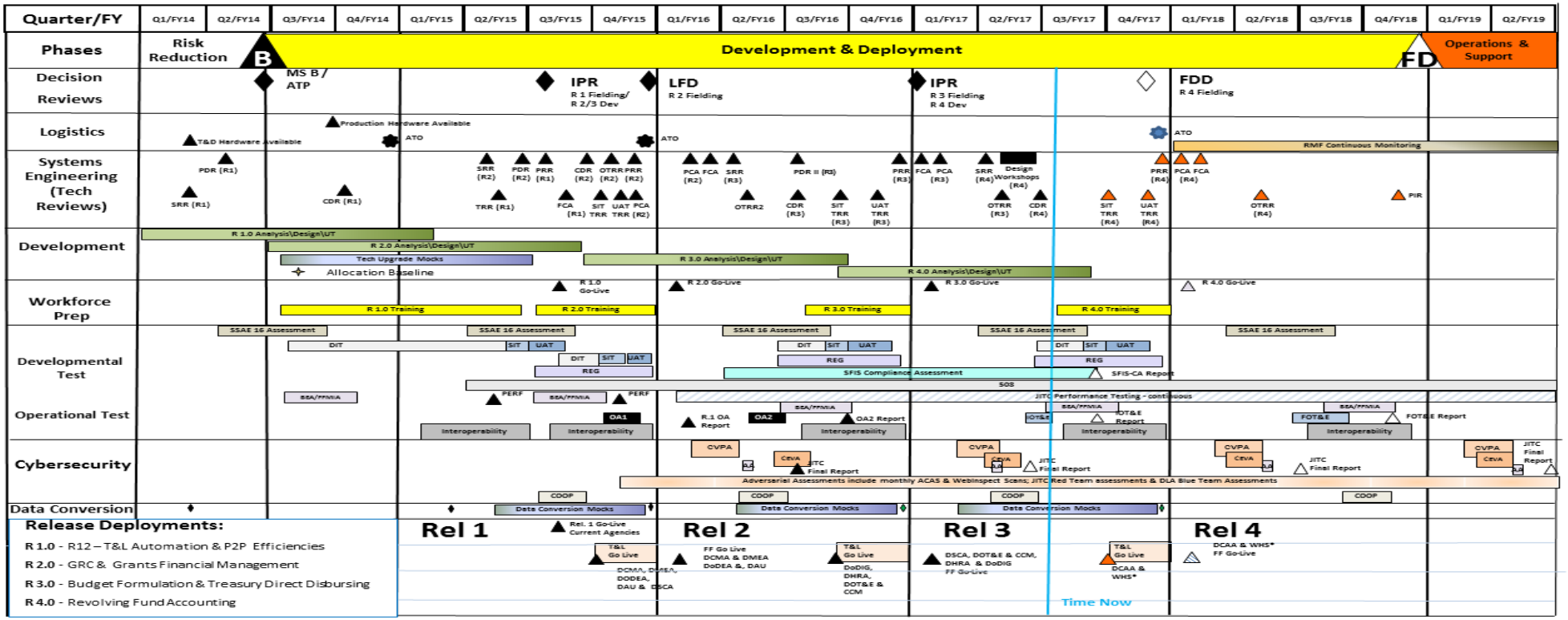
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Test and Development	MIPR	DISA : Pensacola, FL	4.001	4.719	Oct 2015	2.927	Oct 2016	3.250	Oct 2017	0.000		3.250	Continuing	Continuing	-
Independant Testing	MIPR	JITC : Indian Head, MD	2.945	0.328	May 2016	0.328	May 2017	0.344	May 2018	0.000		0.344	Continuing	Continuing	-
Performance and Regression Testing	MIPR	JITC : Ft Huachuca	1.700	0.236	Apr 2016	0.000		-		-		-	0	1.936	-
Operational Test and Evaluation	MIPR	JITC : Fort Huachuca, AZ	2.498	0.251	Oct 2015	0.000	Oct 2016	0.982	Oct 2017	0.000		0.982	Continuing	Continuing	-
DCPS Testing	MIPR	DFAS : Indianapolis, IN	0.083	-		-		-		-		-	0	0.083	-
		Subtotal	11.227	5.534		3.255		4.576		0.000		4.576	-	-	-

	Prior Years	FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	79.757	30.568		30.457		24.436		0.000		24.436	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

Revised INC 2 Schedule



508: Section 508/Disability Test
AA: Adversarial Assessment
ACAS: Assured Compliance Assessment Solution
ATO: Authority to Operate (Includes Production & COOP)
ATP: Authority to Proceed Decision Review
BEA: Business Enterprise Architecture
CCM: Center for Countermeasures
CDR: Critical Design Review
CEVA: Cyber Economic Vulnerability Assessment
COOP: Continuity of Operations Testing
CVPA: Cooperative Vulnerability & Penetration Assessment
DAU: Defense Acquisition University
DCAA: Defense Contract Audit Agency
DCFO: Deputy Chief Financial Officer
DCMA: Defense Contract Management Agency
DHRA: Defense Human Resources Activity
DMEA: Defense Microelectronic s Activity
DODEA: DoD Education Activity
DODIG: DoD Inspector General
DOT&E: Director Operational Test and 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
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

DFAS Data conversion process begins (12-24 months duration/size)

Increment Approach

Updated April 18, 2017

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

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605080S / *Defense Agency Initiatives (DAI) - Financial System*	**Project (Number/Name)** 1 / *Defense Agency Initiatives (DAI) - Financial System)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Operations & Maintenance				
DAI Compliance Support	1	2014	1	2014
DAI Implementation Support	4	2017	3	2019
Infrastructure Support	4	2017	3	2019
Global Model P2P	4	2017	3	2019
Global Model A2R	4	2017	3	2019
Data Conversion	4	2017	3	2019
Dimensions RM Support Maintenance/ Tool	4	2017	3	2019
Research Development Testing & Evaluation				
Test and Development	4	2017	3	2019
Independent Testing	4	2017	3	2019
Operational Test and Evaluation	4	2017	3	2019

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	18.030	9.785	7.949	13.475	-	13.475	2.226	1.753	1.785	1.821	Continuing	Continuing
1: *Defense Retired and Annuitant Pay System 2 (DRAS)*	18.030	9.785	7.949	13.475	-	13.475	2.226	1.753	1.785	1.821	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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	10.135	4.949	4.872	-	4.872
Current President's Budget	9.785	7.949	13.475	-	13.475
Total Adjustments	-0.350	3.000	8.603	-	8.603
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.350	-			
• DRAS2 Establish pre-production & production hosting environments	-	-	1.578	-	1.578
• Reprogramming from O&M	-	-	4.025	-	4.025
• PB17 Amended Program Increase	-	3.000	-	-	-
• PB18 Program Increase	-	-	3.000	-	3.000

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. Base: FY17PB ($4.949M) + Request for Additional Appropriations ($3.000M required to address emergency warfighter readiness. Funds are in support of system integration and development activities for design and testing; requirements development, testing, delivery not supported within the COTS software; a partial procurement of the Oracle PeopleSoft License; and a development of interfaces to the military branches of services and other departments such as the Veteran's Administration (VA) via the Global Exchange (GEX).

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 5: *System Development & Demonstration (SDD)*	**R-1 Program Element (Number/Name)** PE 0605090S *I Defense Retired and Annuitant Pay System (DRAS)*

PB18 Increase to continue the development of the functional and system requirements of DRAS2.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*	Project (Number/Name) 1 / *Defense Retired and Annuitant Pay System 2 (DRAS)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *Defense Retired and Annuitant Pay System 2 (DRAS)*	18.030	9.785	7.949	13.475	-	13.475	2.226	1.753	1.785	1.821	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

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. 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 consolidate disparate DRAS systems and business processes, reduce system redundancies and inefficiencies, and increase customer satisfaction.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Defense Retired and Annuitant Pay System (DRAS) 2	9.785	7.949	13.475
FY 2016 Accomplishments: -Achieved Acquisition Lifecycle Milestone B. -Issued a Task Order to for Build 1 and 2 requirements review and Build 1 system development. -Obtained additional Oracle PeopleSoft COTS software licenses. -Utilized Transaction Services for system interface activities. -Established Data Management environment in MilCloud and begin legacy data cleansing activities. -Completed Build 1 configuration and design activities and began Build 1 development.			
FY 2017 Plans: -Issue a Task Order to finalize Build 3 requirements, begin Build 2 and 3 development, including Conference Room Pilot demonstrations. -Obtain additional COTS software licensing. -Continue development of system interfaces and performance testing. -Establish pre-production hosting environment and perform Cyber Defense Security activities.			
FY 2018 Plans: -Issue a Task Order to continue Build 1 and 2 development, Conference Room Pilot demonstrations and system training. - Perform System Integration, Interoperability, User Acceptance Testing, and Parallel Operations Testing. -Establish production hosting environment and perform Cyber Defense Security activities.			
Accomplishments/Planned Programs Subtotals	9.785	7.949	13.475

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*	**Project (Number/Name)** 1 / *Defense Retired and Annuitant Pay System 2 (DRAS)*

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 is scheduled for Full Deployment in January 2019.

E. Performance Metrics

N/A

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*	**Project (Number/Name)** 1 / *Defense Retired and Annuitant Pay System 2 (DRAS)*

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
DRAS2 System Development and Integration	Option/ IDIQ	CSRA : Herndon, VA	7.372	5.724	Sep 2016	3.100	Oct 2017	10.271	Nov 2017	-		10.271	Continuing	Continuing	-
DRAS2 COTS License Purchase	Option/ IDIQ	CSRA/Oracle : To be Determined	8.808	1.635	May 2016	3.667	May 2017	0.000		-		0.000	Continuing	Continuing	-
DISA Hosting	MIPR	Virtual Operating Environment : Mechanicsburg, PA	0.000	0.721	Nov 2016	0.332	Nov 2017	1.537	Nov 2017	-		1.537	Continuing	Continuing	-
Transaction Services Interface Design	MIPR	DLA Transaction Services : Chambersburg, PA	1.850	1.050	Jul 2016	0.850	May 2016	0.412	Jul 2018	-		0.412	Continuing	Continuing	-
JITC - Testing	MIPR	JITC : To Be Determined	0.000	0.655	Jul 2016	0.000		1.255	Dec 2017	-		1.255	Continuing	Continuing	-
		Subtotal	18.030	9.785		7.949		13.475		-		13.475	-	-	-

	Prior Years	FY 2016 Cost	FY 2016 Award Date	FY 2017 Cost	FY 2017 Award Date	FY 2018 Base Cost	FY 2018 Base Award Date	FY 2018 OCO Cost	FY 2018 OCO Award Date	FY 2018 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	18.030	9.785		7.949		13.475		-		13.475	-	-	-

Remarks

The System Development and Integration IDIQ Contract was awarded 29 September 2016. The program is in the 2nd Option Year of this contract.

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*	**Project (Number/Name)** 1 / *Defense Retired and Annuitant Pay System 2 (DRAS)*

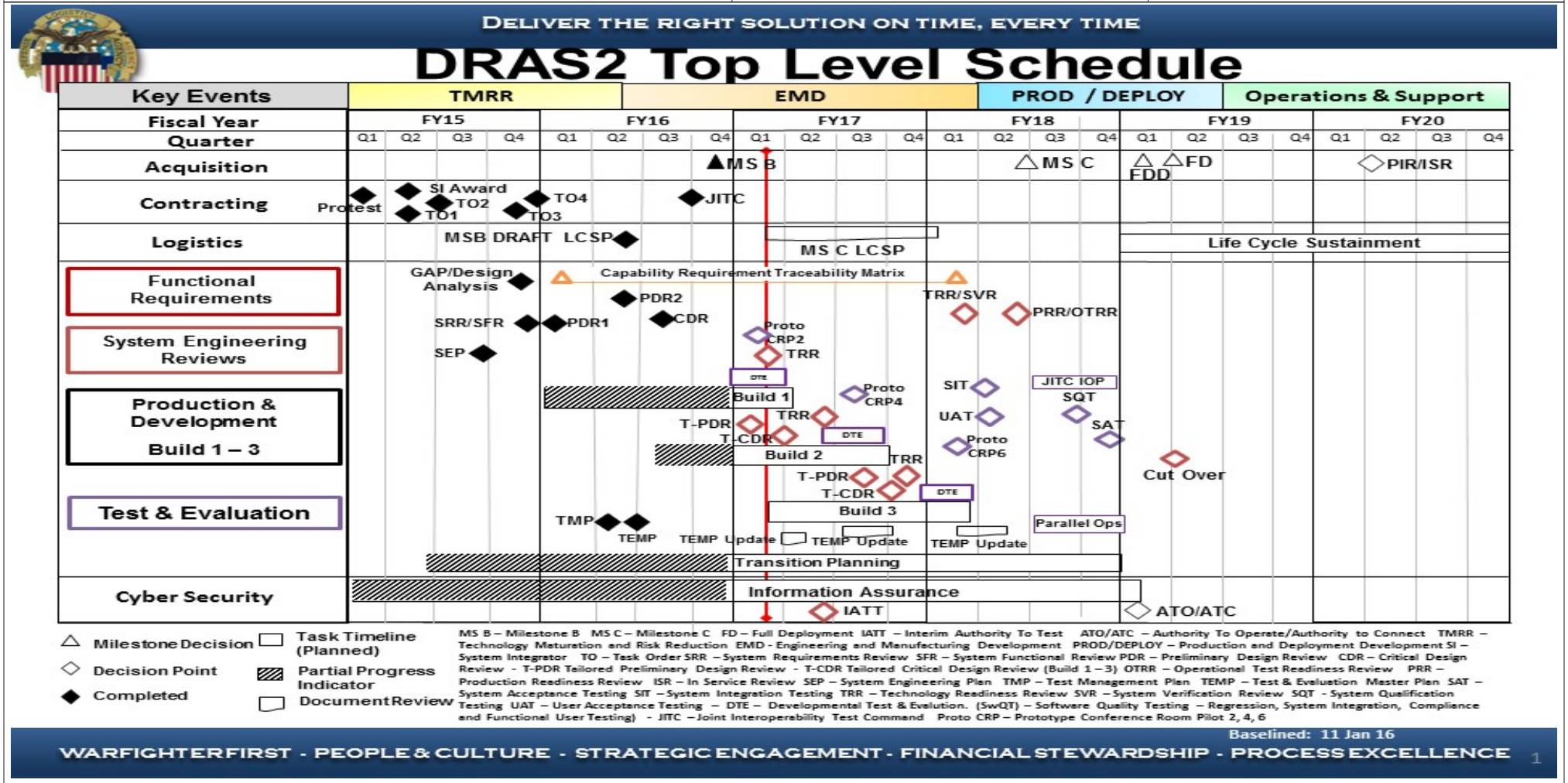


Exhibit R-4A, RDT&E Schedule Details: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 5	**R-1 Program Element (Number/Name)** PE 0605090S / *Defense Retired and Annuitant Pay System (DRAS)*	**Project (Number/Name)** 1 / *Defense Retired and Annuitant Pay System 2 (DRAS)*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
Defense Retired and Annuitant Pay System (DRAS)				
Defense Retired and Annuitant System (DRAS)	1	2017	4	2022

THIS PAGE INTENTIONALLY LEFT BLANK

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 6: *RDT&E Management Support*	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	17.516	5.524	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
1: *Small Business Innovative Research (SBIR)*	17.516	5.524	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 superior 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 flows 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 technical applications of existing technologies to solve current and future agency requirements. Proposals from the small business community will fulfill this requirement. All selections shall demonstrate and involve a reasonable degree of technical risk with yet to be determined technical feasibility. Phase I proposals should demonstrate feasibility of the proposed technology and the merit supporting a Phase II award. Direct impact on a DLA solution, future market possibilities and demonstrated commercialization potential have a strong influence on Phase II selections.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	0.000	0.000	-	0.000
Current President's Budget	5.524	0.000	0.000	-	0.000
Total Adjustments	5.524	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	5.524	-			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*	**Project (Number/Name)** 1 / *Small Business Innovative Research (SBIR)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *Small Business Innovative Research (SBIR)*	17.516	5.524	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 project 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 Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs will develop new dual-use technologies for possible future Defense Logistics Agency (DLA) needs. 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 Defense Logistics Agency's SBIR/STTR investments are divided into multiple Research Areas identified from within several DLA Elements:

DLA J3 R&D
- Additive Manufacturing
- Advanced Battery Manufacturing
- Advanced Aircraft Braking Systems
- Anti-Counterfeiting
- Medical 3D Printing
- Seamless Fuel Bladders
- Strategic Materials
- Warehouse Modernization
- Subsistence
- Limited Source NSN List (Source Approval Request (SAR) Development)
- Reverse Engineering Technical Data Packages

DMEA
- Advanced microelectronics concepts, technologies, and applications.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: SBIR Accomplishments/Plans	5.524	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*	**Project (Number/Name)** 1 / *Small Business Innovative Research (SBIR)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
FY 2016 Accomplishments: DLA SBIR: Executed of all active Phase I and Phase II SBIR/STTR Projects. In the DOD-wide 2016.1 solicitation, DLA selected 11 new Phase I projects and 1 Direct to Phase II project. The 16.3 solicitation yielded 4 new Phase I projects and the 16.3 solicitation is expected to produce 4 new Phase I projects. In FY16, the program awarded 6 new Phase II awards. All Phase II awards utilized OSD/OSBP funding ($8M) documented on DD form 1144. Upon completion, all active Phase I projects have the opportunity to compete for Phase II awards. DLA STTR: Executed of all active Phase II STTR projects. DLA STTR awarded 3 New Phase I contracts exhausting FY15 funds. Upon completion, all active Phase I projects have the opportunity to compete for Phase II awards. DMEA SBIR: Completed feasibility studies for quantum cryptography single-photon detector chip. Completed a feasibility study for rapid and agile detection of counterfeit microelectronics by illuminating devices with RF energy and acquiring the subsequent emission signature. Completed a feasibility study for high-resolution x-ray microscopy of microelectronic devices. Completed feasibility studies for the analysis of integrated circuits using limited x-rays. Completed prototype development for a high-efficiency, high-resolution x-ray system for inspecting integrated circuits. DMEA STTR: Completed feasibility studies for developing a ZnS scintillator for high-resolution x-ray imaging of integrated circuits at 9KeV, and for developing a new sensor for 9KeV high resolution x-ray microscopy.			
FY 2017 Plans: DLA SBIR: To continue execution of all active Phase I and Phase II SBIR/STTR Projects. In the DOD-wide 2017.1 solicitation, DLA expects two new topics. Anticipate the selection of one to three topics per area. Upon completion, all active Phase I projects have the opportunity to compete for Phase II awards. DLA expects to award 6 new Phase II awards. All Phase II awards utilize OSD/OSBP funding ($6M) documented on DD form 1144. DLA STTR: To 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 late FY17. This will exhaust all FY16 and FY17 STTR funds. DMEA SBIR: 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.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 6	**R-1 Program Element (Number/Name)** PE 0605502S / *Small Business Innovative Research (SBIR)*	**Project (Number/Name)** 1 / *Small Business Innovative Research (SBIR)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
DMEA STTR: DMEA will continue execution of all active STTR projects. All active Phase I projects have the opportunity to progress to Phase II. DMEA will begin to study the feasibility of developing an optical metrology system for measuring the thickness of thin films on top of sapphire substrate wafers. ***FY 2018 Plans:*** DLA SBIR/ STTR: To continue execution of all active Phase I and Phase II SBIR/STTR projects. DLA expects to award 6-10 new Phase I awards, and 6-8 new Phase II awards. 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	5.524	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

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 and Phase II to Phase III, DLA deems each successive progression success. DLA seeks to have a 50% 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: FY 2018 Defense Logistics Agency											Date: May 2017	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness*							
COST ($ in Millions)	**Prior Years**	**FY 2016**	**FY 2017**	**FY 2018 Base**	**FY 2018 OCO**	**FY 2018 Total**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**Cost To Complete**	**Total Cost**
Total Program Element	0.000	21.843	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	21.843
7: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	0.000	5.293	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.293
8: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	0.000	10.188	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.188
9: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	0.000	6.362	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.362

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 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.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*

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

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	22.605	0.000	0.000	-	0.000
Current President's Budget	21.843	0.000	0.000	-	0.000
Total Adjustments	-0.762	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.762	-			

Change Summary Explanation

Over the FY 17, $9.346M was realigned to the ManTech PE from the DLA Log R&D PE (0603712S) and DLA Procurement Defense-Wide. These funds will address critical shortfalls in the Improving Industrial Base Manufacturing Processes and Maintaining Viable Supply Sources SFA's. The largest requirement was in the Maintaining Viable Supply Sources to develop a long-term, reliable source of linear microcircuits. These devices are critical to maintaining the readiness of front line weapon system electronics. High priority requirements in the Improving Industrial Base Manufacturing Processes SFA included additional funding for battery technology, castings and forging manufacturing technology.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness*	Project (Number/Name) 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
7: *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*	0.000	5.293	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	5.293
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Material Availability (MA) Strategic Focus Area (SFA) is an R&D effort 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 Subsistence Program (former Combat Rations Program), the Battery Program, the Castings and the Forgings programs.

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 Network objective is to research and promote manufacturing improvements in the subsistence supply chain with the goals of leveraging the latest technologies, encouraging innovation and modernization, and to maximizing capability and capacity in subsistence. The areas of research includes: combat rations, food equipment, field feeding solutions, food footprint, food innovations, food safety and defense, garrison feeding, nutrition and health, storage and packaging solutions, surge and sustainment support, and water security. The Microwave Assisted Thermal Sterilization (MATS), MRE Alternate Chemical Laminate, Optimize Combat Ration Inspection Costs, and Combat Rations Shelf Life Temperature Monitoring Project are current short-term projects that will have desired results such as improved processes, enhanced quality of individual and group combat rations, reduced cost associated with combat rations inpsections, and increased efficiencies, then transition these improvements as applicable 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). 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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

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 material and technological solutions 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Improving Industrial Base Manufacturing Processes (formally Material Availability)	5.293	0.000	-
FY 2016 Accomplishments: The Subsistence Network issued a new Broad Agency Announcement (BAA) in July 2016 and will remain open for five years. The BAA projects have an expected duration of 6-24 months and the government plans to invest up to $18 million during Fiscal Years 2017-2021 for funding research in response to this BAA. The 5 MILMRE Menu Bag Test, a short term study associated with the Meals Ready-to-Eat (MRE) Chemical Laminate project was completed in December of 2016. The work on three Short Term Projects (STP) (Optimize Combat Rations Inspection, Microwave Assisted Thermal Sterilization (MATS), and MRE Shelf Life Temperature Monitoring Project) were extended at the government request in FY16 to fund additional research, development and testing of these projects. Further research and testing on the Optimize Combat Rations Inspection project will identify and test 18 cost savings measures. On the MATS project, a Microwave Assisted Thermal Sterilization Carrier Tray was designed and tested to optimize the product quality that the MATS can produce. The MRE Shelf Life Temperature Monitoring Project was extended to examine other subsistence storage and distribution points, including transportation systems and determine the temperature and humidity conditions that subsistence items are exposed to at the locations. The Small Business Innovation Research program Subsistence Topics were released in September 2016 and STPs were reviewed for consideration of Phase I selection in 2017.			
FY 2017 Plans: FY17 Fund Realignment from BA07 to BA03 PE 0603680S.			
Accomplishments/Planned Programs Subtotals	5.293	0.000	-

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

The Battery Network plan is to establish contract partners through a competitive Broad Area Announcement (BAA) based upon proposals that demonstrated knowledge, experience, and expertise in the following areas of interest: Automation, Diminishing Manufacturing & Supply, Battery Safety, Reducing Acquisition Costs, Shelf Life, Supply Chain Logistics, Surge/Sustainment, and Technology Transition/Insertion. A Government Steering Group (GSG) of power source technical experts from the military services R&D groups will inform general R&D requirements for supply chain and technology improvement. The plan also includes awarding Phase 2 and 3 projects from DLA's Small Business Innovation Research (SBIR) in advanced battery manufacturing technology.

The Subsistence Network Broad Agency Announcement (BAA) for the acquisition of research and development of short term projects was released in July 2016 and will remain open for five years, FY17 – FY21. A Joint Steering Group made up of government representatives from the Military Services, DLA, U.S. Department of Agriculture, U.S. Public Health Center, and the Natick Soldier Research, Development and Engineering Center will review ongoing projects, identify new areas for investment, assess proposed projects, examine procedures and processes, keep abreast of new technologies, and understand DLA and DoD subsistence needs and requirements.

The DLA Castings R&D Program involved a competitive Broad Agency Announcement (BAA) in FY16 soliciting for new R&D projects. Evaluations will be completed in 2017, with multiple contract awards anticipated for 2017. The current contracts reached the end of their base period of performance on September 30, 2016, which were also awarded under a competitive BAA in 2011.
The DLA Forgings R&D projects were awarded through a competitive Broad Agency Announcement (BAA).

E. Performance Metrics

The Battery Network plan is to report returns on investments and achievements to the Joint Defense Manufacturing Technology Panel (JDMTP) for evaluation.

The Subsistence Network plan is to execute reductions in cost for shipping, storage, supply chain process, inventory, waste and inspections, as well as reduced lead times for combat ration production, field feeding equipment, garrison feeding and "market fresh."

For example, SUBNET will provide the following technical achievements: 1) a microwave-assisted capability to sterilize group-sized entrees and components, packaged in Institutional Sized Pouches (ISP) and Polymeric Trays and 2) identify and produce at least one or more alternate sealant layers that can be used by the rations industry to pack high acidic food products and to ensure uninterrupted supply of MRE rations.

The Castings consortium plan is to report returns on investments and achievements to the Joint Defense Manufacturing Technology Panel (JDMTP) for evaluation.

The Forgings consortium plan is to report returns on investments and achievements to the Joint Defense Manufacturing Technology Panel (JDMTP) for evaluation.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 7 / *Improving Industrial Base Manufacturing Processes (formerly Material Availability)*

The Additive Manufacturing metric is the number of parts qualified for AM and the lead-time savings achieved to make small quantities of items.

At least 30% of the completed projects will transition.

OSD-C financial metrics (obligation and disbursement) will be achieved.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness*	Project (Number/Name) 8 / *Maintaining Viable Supply Sources (formerly High Quality Sources)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
8: *Maintaining Viable Supply Sources (formerly High Quality Sources)*	0.000	10.188	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	10.188
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 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Maintaining Viable Supply Sources (formally High Quality Sources)	10.188	0.000	-
FY 2016 Accomplishments: MAE continued planning for the specific emulation technology implementations to support specific device family groups in consonance with customer and agency requirements. MAE completed development and transitioned higher density Read-Only and Random-Access Memory, Advanced Emitter-Coupled Logic and Closed-Cell CMOS capabilities into full-scale production, further increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. The newly transitioned emulation capabilities address several discontinued device families and will increase the potential emulation production envelope by several hundred NSNs. MAE also initiated new implementations including development of TTL-Compatible CMOS Emulation Capability and development of reverse engineering and design capability for Field-Programmable Gate Arrays (FPGAs). It continued developing 350 nanometer Digital Emulation circuitry, bringing emulation capability that re-establishes sources for additional			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 8 / *Maintaining Viable Supply Sources (formerly High Quality Sources)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
NSNs. AME also completed initial development and capability assessments (gap analysis) to support a new major emulation thrust to support Linear Microcircuits beginning in FY2017. ***FY 2017 Plans:*** FY17 Fund Realignment from BA07 to BA03 PE 0603680S			
Accomplishments/Planned Programs Subtotals	10.188	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

MAE efforts are incremental funding on a competitive awarded 5 year contract.

Strategic Materials efforts will be competitively evaluated and awarded using Broad Agency Announcement (BAA) procedures.

E. Performance Metrics

Transition of one technology implementation (base array) to low-rate initial production or full-scale production. Each technology implementation increases the breadth of microcircuit part types which can be returned to a procurable status; improving readiness and avoiding the need to redesign at the next-higher level. Potential benefit to hundreds of weapon systems.

Strategic Materials: Develop roadmap and transition targeted manufacturing technologies.

At least 30% of the completed projects will transition.

OSD-C financial metrics (obligation and disbursement) will be achieved.

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 9 / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
9: *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*	0.000	6.362	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	0.000	6.362
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 recreate 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Improving Technical and Logistics Information (formally Industry and Customer Collaboration)	6.362	0.000	-
FY 2016 Accomplishments:			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness*	**Project (Number/Name)** 9 / *Improving Technical and Logistics Information (formerly Industry and Customer Collaboration)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
The MUST program completed plans to set up distributed pilots of the knowledge based approach. The pilots are developing and demonstrating a digital specification authoring tool, a 3D visualization tool, and technology to streamline the transition of requirements from the Services to DLA. This technology allows DLA, its customers and suppliers to access, manage and share technical requirements in a common format. The DLIR program completed the Strategic Sourcing Tool Project which provided an automated and repeatable process with an accompanying application for rapidly identifying commercially available equivalents for stocked NSNs. Additionally, the DLIR program initiated the Product Lifecycle Management (PLM) Interoperability Project. Currently, technical part data must be manually aggregated and interpreted, and then re-entered and verified within the various systems used by the Services, DLA, and its suppliers, to ensure consistency of all requirements. This project will attempt to semi-automate integration of requirements within each system, improve exchange across systems, and ensure that all participants are made aware of changes that affect these requirements. ***FY 2017 Plans:*** FY17 Fund Realignment from BA07 to BA03 PE 0603680S			
Accomplishments/Planned Programs Subtotals	6.362	0.000	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Delivery/Task Orders are awarded against a competitively awarded IDIQ contracts.

E. Performance Metrics

The metrics for ICC are error elimination in engineering and technical data, including omissions and uncertainties in specifications, streamlining vendor level of effort associated with completing procurements, and improved collaboration among the Services, DLA and the industrial base. The result will lead to reduced lead-time, inventory and to avoid the costs of defective material.

At least 30% of the completed projects will transition.

OSD-C financial metrics (obligation and disbursement) will be achieved.

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Centers*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	16.582	1.709	1.754	1.770	-	1.770	1.770	1.770	1.785	1.821	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
2: *Pacific Disaster Center*	4.094	1.709	1.754	1.770	-	1.770	1.770	1.770	1.785	1.821	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. Logistics Support Activities (LSA) transferred to outside DLA in FY15.

B. Program Change Summary ($ in Millions)	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	1.770	1.754	1.755	-	1.755
Current President's Budget	1.709	1.754	1.770	-	1.770
Total Adjustments	-0.061	0.000	0.015	-	0.015
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.061	-			
• Funds Transfer	-	-	0.015	-	0.015

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. Base: FY18PB ($1.754M) + Request for Additional Appropriation ($0.000M).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S / *Pacific Disaster Centers*	Project (Number/Name) 1 / *Logistics Support Activities (LSA)*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	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 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: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S / *Pacific Disaster Centers*	Project (Number/Name) 2 / *Pacific Disaster Center*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
2: *Pacific Disaster Center*	4.094	1.709	1.754	1.770	-	1.770	1.770	1.770	1.785	1.821	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 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). 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Pacific Disaster Center (PDC)	1.709	1.754	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 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. 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 develops and provides policy, oversight and guidance, and jointly develops strategic guidelines, programmatic content and

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Centers*	**Project (Number/Name)** 2 / *Pacific Disaster Center*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
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 2016 Accomplishments:*** The Pacific Disaster Center (PDC) continues to be at the forefront of improving disaster-reduction decision-support capabilities through the application of information, science and technology. PDC's products and services enhance foundational and global services supporting civil-military humanitarian assistance operations by the US Military and US agencies, state agencies, United Nation agencies, ASEAN, national governments, and International/Non-Governmental Organizations (I/NGO). Foundational and Global Services include projects supporting development, analysis, and delivery of relevant and actionable information. These activities fall into three categories: Global Information Services; Anticipatory Sciences and Socio-Economic Risk and Vulnerability Assessment; and Decision Support Platforms and Applications. Emphasis areas in FY 2016 include: • Improve the simplified DisasterAWARE/RAPIDS user interface (a.k.a. "dashboard") for increased ease-of-use and situational awareness, while allowing the system to accommodate "no/low bandwidth" operational mode (enabling better support to mobile platforms, as well as, degraded communications) • Extend and enhance mobile computing and situational awareness platform for DisasterAWARE/RAPIDS to include: a) cross-device and cross-platform functionality, optimized for touch interface appropriate for mobile devices; b) limited "down range" data collection & sharing capabilities (e.g., damage photos, voice memos, etc.) c) investigate and implement degraded but functional/operational "off-grid" capabilities d) investigate and implement user customization and data import capabilities • Enhance DisasterAWARE's social media/network visualization capabilities, in collaboration with partners such as ONR-funded research in the subject matter • Extend and enhance Bio Surveillance capabilities in collaboration with Navy and Defense Threat Reduction Agency's (DTRA)Bio Surveillance Portal (BSP) Joint Program Executive Office • Extend collaboration with DTRA & other data providers in enhancing data fusion capabilities • Continue to emphasize and participate jointly- and externally-funded research and application programs to enhance the Center's capabilities and experiences which in turn can be operationalize and applied in direct support of DoD HA/DR and DSCA missions • Continue to grow competitive grants and proposals as a means to expand the center’s capabilities, and leverage these new capabilities in support of DoD missions ***FY 2017 Plans:*** Risk and Vulnerability Assessment • Explore trends and shifts in risks and vulnerability using the last 7 years of data.			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Centers*	**Project (Number/Name)** 2 / *Pacific Disaster Center*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Explore creating country-report where subnational data are available (based on COCOM NDPBA country projects) Data • In accordance with the latest (DRAFT) DoD study for unclassified information systems for disaster preparedness, enhance development of standard protocols for interoperability. • Continue development of new data sources for hazards and related observational data TBD Modeling • Explore incorporating impacts from hazard models into the definition of disasters within the system. • Continue enhancing application of hazard models to estimating initial needs for HA/DR support missions Applications • Enhance RAPIDS functionality based on user feedback and requirements • Continue improving stabilization of the platform by increasing cloud-based utilization • Continue evaluating new and innovative technologies for enhancing user experience (for RAPIDS)			
FY 2018 Plans: Risk and Vulnerability Assessment • Explore trend analysis based on existing Global RVA data accumulated of the prior years • Improve analytical reporting/visualization and automated assessment capabilities using Global RVA data • Incorporate country-report analytical capabilities into the above assessment reporting capabilities Data • Explore feasibility of hosting classified data in RAPIDS, should the application be hosted on SIPR • Continue development of data sources for hazards and related observational data TBD Modeling • Integrate alerting capabilities and hazard impact modeling • Continue enhancing application of hazard models to estimate initial needs for HA/DR support missions Application			

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency		Date: May 2017
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708012S / *Pacific Disaster Centers*	**Project (Number/Name)** 2 / *Pacific Disaster Center*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
• Improve performance of the system and enhance user experience • Improve mobile device-related features (e.g. battery usage, etc.) • Continue evaluating new and innovative technologies for enhancing user experience (for RAPIDS)			
Accomplishments/Planned Programs Subtotals	1.709	1.754	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 2012-2016 PDC Strategic Plan. 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-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708047S / *Defense Property Accountability System (DPAS)*

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	0.000	0.000	2.154	2.924	-	2.924	2.972	3.021	3.071	3.132	Continuing	Continuing
1: *DPAS*	0.000	0.000	2.154	2.924	-	2.924	2.972	3.021	3.071	3.132	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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	0.000	2.154	2.924	-	2.924
Current President's Budget	0.000	2.154	2.924	-	2.924
Total Adjustments	0.000	0.000	0.000	-	0.000
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			

Change Summary Explanation

A full-year FY 2017 appropriation for this account was not enacted at the time the budget was prepared; therefore, the budget assumes this account is operating under the Continuing Appropriations Resolution, 2017 (P.L. 114-254). The amounts included for 2017 reflect the annualized level provided by the continuing resolution. Base: FY17PB ($2.154M) + Request for Additional Appropriations ($0.000).

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency			Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708047S / *Defense Property Accountability System (DPAS)*	Project (Number/Name) 1 / *DPAS*	

COST ($ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
1: *DPAS*	0.000	0.000	2.154	2.924	-	2.924	2.972	3.021	3.071	3.132	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2016	FY 2017	FY 2018
Title: Release DPAS v 4	-	2.154	2.924
Description: Provide enhancements to the warehouse management functions; incorporate vehicle telematics; improve the data warehousing for transaction history. ***FY 2017 Plans:*** 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.			
Accomplishments/Planned Programs Subtotals	-	2.154	2.924

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.