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

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Defense Logistics Agency • Budget Estimates FY 2018 • RDT&E Program

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

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	Remaining Req
Research, Development, Test & Eval, DW	214,251	188,241	188,070				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

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

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	Remaining Req	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

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	Remaining Req
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				

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	Remaining Req	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

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	Remaining Req
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				

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	Remaining Req	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)

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	Remaining Req
Defense Logistics Agency	214,251	188,241	188,070				
Total Research, Development, Test & Evaluation	214,251	188,241	188,070				

Defense-Wide

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

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	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Defense Logistics Agency	188,241	188,070	Ų.	188,070	319,796		319,796
Total Research, Development, Test & Evaluation	188,241	188,070	v	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)

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

	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 S with CR Adj e OCO C
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				υ
52	0603713s	Deployment and Distribution Enterprise Technology	03	29,888						Ü
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				ט
130	0605080s	Defense Agency Initiatives (DAI) - Financial System	05	30,568	26,657	30,457				υ
131	0605090s	Defense Retired and Annuitant Pay System (DRAS)	05	9,785	4,949	7,949				υ.
	Syste	em Development And Demonstration		51,854	44,237	44,066				
159	0605502s	Small Business Innovative Research	06	5,524						U
	Manag	gement 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

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FY 2018 President's Budget Request

Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

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

Program Line Element No Number	Item	Act	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA		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	S e C .
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	Ū
52 0603713S	Deployment and Distribution Enterprise Technology	03								υ
54 0603720S	· Microelectronics Technology Development and Support	03	97,826	97,826	-	97,826	219,803		219,803	
Advanced Technology Development			140,096	140,096		140,096	270,925	have have most from which shall have have these these	270,925	
128 0605070s	DOD Enterprise Systems Development and Demonstration	05	12,631	5,660		5,660	6,266		6,266	Ü
130 0605080S	Defense Agency Initiatives (DAI) ~ Financial System	05	26,657	30,457		30,457	24,436		24,436	σ
131 0605090s	Defense Retired and Annuitant Pay System (DRAS)	05	4,949	7,949		7,949	13,475		13,475	ΰ
Syste	em Development And Demonstration		44,237	44,066		44,066	44,177		44,177	
159 0605502S	Small Business Innovative Research	06								U
Manag	gement Support		has after and two and two left first and deal							
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

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FY 2018 President's Budget Request Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

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

	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	Remaining Req	
246	0708047S	Defense Property Accountability System	07		2,154	2,154					Ü
Operational System Development				23,552	3,908	3,908		** ** ** ** ** ** ** ** ** ** ** ** **			
Total	L Research,	. Development, Test & Eval, DW		214,251	188,241	188,070					

Defense-Wide

FY 2018 President's Budget Request

Exhibit R-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

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

Line No 	Program Element Number	Item	Act	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	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total	s e c ı
246	0708047S	Defense Property Accountability System	07	2,154	2,154		2,154	2,924		2,924	U
	Opera	ational System Development		3,908	3,908		3,908	4,694		4,694	
Tota	l Research	, Development, Test & Eval, DW		188,241	188,070		188,070	319,796		319,796	

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

Program Line Element No 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	_	S e C
			4 500							
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					ט
52 0603713s	Deployment and Distribution Enterprise Technology		29,888							υ
54 0603720s	Microelectronics Technology Development and Support		86,832	97,826	97,826			÷		Ü
Advanced Technology Development			133,321	140,096	140,096					
128 0605070s	D5070S DOD Enterprise Systems Development and Demonstration		11,501	12,631	5,660					Ü
130 0605080s	Defense Agency Initiatives (DAI) - Financial System	05	30,568	26,657	30,457					ש
131 0605090s	Defense Retired and Annuitant Pay System (DRAS)	05	9,785	4,949	7,949					υ
System Deve	lopment And Demonstration		51,854	44,237	44,066	ATT THE REAL PROPERTY OF THE PER AND THE P	000 NW 100 NW 200 NW 000 NW 000 NW			
159 0605502\$	Small Business Innovative Research	06	5,524							U
Management	Support		5,524				me was not not any net net too not one			
244 0708011s	Industrial Preparedness	07	21,843							U
245 0708012S	Pacific Disaster Centers	07	1,709	1,754	1,754					υ
246 0708047s	Defense Property Accountability System	07		2,154	2,154					U
Operational	System Development		23,552	3,908	3,908	beer down have based down hand high wolf down hide				

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

Program Line Element No 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	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total	S e C
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								Ū
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			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	Ŭ
131 0605090s	Defense Retired and Annuitant Pay System (DRAS)	05	4,949	7,949		7,949	13,475		13,475	Ū
System Deve	Lopment And Demonstration		44,237	44,066		44,066	44,177	OP1 90% GOO DAX HID 2005 THE GOO GOT 2006	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		2,154	2,154		2,154	2,924		2,924	σ
Operational System Development			3,908	3,908	and that are here and and here and and are	3,908	4,694		4,694	•

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

						FY 2017		FY 2017	FY 2017		
					FY 2017	Total	FY 2017	Total	Less Enacted	FY 2017	
	Program				PB Request	PB Requests*	PB Request	PB Requests*	Div B	Remaining Req	S
Line	Element			FY 2016	with CR Adj	with CR Adj	with CR Adj	with CR Adj	P.L.114-254**	with CR Adj	е
_ No	Number	Item	Act	Base + OCO	Base	Base	oco	oco	000	000	C
ě											-
Tota	Total Defense Logistics Agency			214,251	188,241	188,070					

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

Program Line Element No 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	Remaining Req	FY 2018 Base	FY 2018 OCO	FY 2018 Total	S e c
Total Defense Logi	stics Agency		188,241	188,070		188,070	319,796		319,796	

Defense Logistics Agency • Budget Estimates FY 2018 • RDT&E Program

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

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

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33	03	0603264S	Agile Transportation for the 21st Century (AT21) Theater CapabilityVolume 5 - 1
49	03	0603680S	Manufacturing Technology Program (ManTech)Volume 5 - 5
51	03	0603712S	Generic Logistics R&D Technology Demonstrations (Log R&D)Volume 5 - 15
52	03	0603713S	Deployment and Distribution Enterprise Technology
54	03	0603720S	Microelectronics Technology Development and Support (DMEA)Volume 5 - 41

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

Line #	Budget Activ	ity Program Element Number	Program Element Title Page
128	05	0605070S	DoD Enterprise Systems Development and Demonstration
130	05	0605080S	Defense Agency Initiatives (DAI) - Financial SystemVolume 5 - 61
131	05	0605090S	Defense Retired and Annuitant Pay System (DRAS)Volume 5 - 77

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

Line #	Budget Acti	vity Program Element Number	Program Element Title Pag	je
159	06	0605502S	Small Business Innovative Research (SBIR)	35

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

Line #	Budget Activit	y Program Element Number	Program Element Title Page
244	07	0708011S	Industrial PreparednessVolume 5 - 89
245	07	0708012S	Pacific Disaster CentersVolume 5 - 99
246	07	0708047S	Defense Property Accountability System (DPAS)

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Program Element Title	Program Element Number	Line #	BA Page
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Defense Agency Initiatives (DAI) - Financial System	0605080S	130	05Volume 5 - 61
Defense Property Accountability System (DPAS)	0708047S	246	07Volume 5 - 105
Defense Retired and Annuitant Pay System (DRAS)	0605090S	131	05Volume 5 - 77
Deployment and Distribution Enterprise Technology	0603713S	52	03Volume 5 - 25
DoD Enterprise Systems Development and Demonstration	0605070S	128	05Volume 5 - 51
Generic Logistics R&D Technology Demonstrations (Log R&D)	0603712S	51	03Volume 5 - 15
Industrial Preparedness	0708011S	244	07Volume 5 - 89
Manufacturing Technology Program (ManTech)	0603680S	49	03Volume 5 - 5
Microelectronics Technology Development and Support (DMEA)	0603720S	54	03Volume 5 - 41
Pacific Disaster Centers	0708012S	245	07Volume 5 - 99
Small Business Innovative Research (SBIR)	0605502S	159	06Volume 5 - 85



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(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: Advan	ced Tech	nology Developmer	nt (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

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(Listing by Budget Activity, then Program Element Number)

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 [Develo	pment & 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	Manag	ement Support		17.516	5.524	0.000	0.000	-	0.000

Defense Logistics Agency • Budget Estimates FY 2018 • RDT&E Program Exhibit R-1

(Listing by Budget Activity, then Program Element Number)

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: Operation	onal Sys	stems Development		16.582	23.552	3.908	4.694	-	4.694



Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3:

PE 0603264S I Agile Transportation for the 21st Century (AT21) Theater Capability

Date: May 2017

Advanced Technology Development (ATD)

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.

PE 0603264S: *Agile Transportation for the 21st Centur...*Defense Logistics Agency

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xhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency										Date: May 2017		
Appropriation/Budget Activity 0400 / 3					PE 0603264S I Agile Transportation for the 1 I Agile Tra			umber/Name) ansportation for the 21st Century ater 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

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Exhibit R-2A, RDT&E Project Justification: FY 2018 De	fense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603264S I Agile Transportation for the 21st Century (AT21) Theater Capability	Project (Number/Name) 1 I Agile Transportation for the 21st Century (AT21) Theater Capability
<u>D. Acquisition Strategy</u> N/A		
E. Performance Metrics		
	sess maps delineating gaps in information flow and prototype systemance in theater transportation operations. >80% transition rate of	
	marioe in tricator transportation operations. Fee // transition rate (or proven teermologies/supubmites.

PE 0603264S: *Agile Transportation for the 21st Centur...*Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3:

PE 0603680S I Manufacturing Technology Program (ManTech)

Date: May 2017

Advanced Technology Development (ATD)

, in a more 100 money 2010 of 110 money (1112)												
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.

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity R-1

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)

Date: May 2017

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).

PE 0603680S: Manufacturing Technology Program (ManTec... Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	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 I Manufacturing Technology Program (ManTech)				Project (Number/Name) 7 I 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%

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Ager	су		Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S / Manufacturing Technology	, ,	umber/Name) ng Industrial Base Manufacturing
040073	Program (ManTech)		(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.			

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen Appropriation/Budget Activity 0400 / 3 B. Accomplishments/Planned Programs (\$ in Millions) The Forging program will receive an increase in funding to cover most of the ur process. Proposals are required to include a business case with specific metric consortium will also pursue additional forging manufacturing advances from such	R-1 Program Element (Number/Name) PE 0603680S I Manufacturing Technology Program (ManTech)	Project (Num 7 I Improving	Industrial Base ormerly Material	
B. Accomplishments/Planned Programs (\$ in Millions) The Forging program will receive an increase in funding to cover most of the unprocess. Proposals are required to include a business case with specific metric	PE 0603680S I Manufacturing Technology Program (ManTech)	7 I Improving Processes (fo	Industrial Base ormerly Material	
The Forging program will receive an increase in funding to cover most of the ur process. Proposals are required to include a business case with specific metric	nfunded requirements identified during the PB	FY 20		
process. Proposals are required to include a business case with specific metric	nfunded requirements identified during the PB		16 FY 201	7 FY 2018
\mathbf{i}	cs and transition plan for success. The Forgin	g		
The Battery Network funding will be applied to pursue additional projects includ soldier batteries, military ground vehicle batteries, and aviation batteries; manuacid and nickel cadmium batteries to advanced lithium-ion batteries; and batteriechnologies. These projects will address pressing supply chain issues by migrindustrial base, and will achieve cost reduction by optimizing the manufacturing	facturing transition of legacy and obsolete learly manufacturing automation and optimization rating from declining manufacturing to a high g	d		
The Additive Manufacturing plan is for DLA to partner with the Military Services will identify candidate parts, convert technical data to 3D format to facilitate AM for AM benefits. The Services will review newly created technical data package acceptable process to produce the parts.	l, procure the parts, and document the proces	s		
FY 16 – FY 20: Funding for Additive projects will be reallocated from other MA Manufacturing Thrust.	SFA thrusts and classified into the Additive			
FY 2018 Plans: The Battery Network will initiate new projects and continue efforts from FY17 fo and standardization of soldier and system batteries within the DLA supply chair manufacturing technologies for the supply chain that have been developed in S production, low cost materials production or recycling, advanced performance of in manufacturing and material improvements for the vacuum electron tube supplied and pursue additional opportunities.	n. The Program will also leverage new battery SBIR - electrode laser cutting, solvent-free elected. Cells. DLA will also complete the initial investn	ctrode nents		
The Subsistence Network program plans to initiate and execute short-term proj SUBNET will also continue to pursue Small Business Innovation Research Top also continue to work with community partners (military services, industry, and encourage innovation and modernization, and promote manufacturing improver	oics in Subsistence. The Subsistence Network academia) to leverage the latest technologies	will		
The Castings program plans to investigate, develop and deploy innovative ente supply chains for the Department of Defense and the Defense Logistics Agency		ting		

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	Logistics Agency		Date: N	1ay 2017	
Appropriation/Budget Activity 0400 / 3	Project (Number/Name) 7 I Improving Industrial Base Manufacturing Processes (formerly Material Availability)				
B. Accomplishments/Planned Programs (\$ in Millions)		F	Y 2016	FY 2017	FY 2018
competitively awarded to fulfill those requirements. Projects will transition plan for success. The Casting program will also continuation plan for success. The Casting program will also continuation projects approximation of the Forging program will also continuate executing projects approximation of the Forging program will also continuate executing projects approximation projects approximation of the Forging project will be required to include a business case program will also continuate executing projects that are approved	nue executing projects approved and awarded in prior years. oved and awarded in prior years. In addition, the Forging programents identified during the PBR17 process. Projects identifientical solutions to improve casting supply chains for the Depart artighter. Contracts will be competitively awarded to fulfill those with specific metrics and transition plan for success. The Fo	ram d will ment			
DLA R&D plans to leverage Industry and the Military Service Er the Army, Navy, Marine Corps, Air Force) and the Department of the respective agreements. Desired outcomes include: accelera AM, identification of AM applications for castings and forging preexploration of conversion of recyclable materials to AM material optimization of metal AM production to obtain land, air and sea of AM parts qualified for procurement and achieve savings from some cases reduction of fuel consumption due to lighter design product realization in order to address unfulfilled Warfighter reac	of Energy by providing funding for AM work identified under ation of rapid qualification and certification methodologies for eforms, rapid cast production and repair of castings using AM I, improved reverse engineering processes for AM purposes, a platform spare parts. These efforts seek to increase the number the associated lead-time, storage costs, transportation costs, and material options. Overall AM efforts will provide alternative	, and er in			
·	Accomplishments/Planned Programs Sub	otals	-	10.924	16.22

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.

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	xhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency										Date: May 2017		
					, , ,				Project (Number/Name) 8 I 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-			

PE 0603680S: Manufacturing Technology Program (ManTec...
Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Lo	ogistics Agency		Date: N	/lay 2017		
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S I Manufacturing Technology Program (ManTech)	Project (Number/Name) 8 I 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 Rando prototyping 350 nanometer emulation circuitry, bringing emulation Strategic Materials: A request for white paper proposals was recercifical initial manufacturing technology requirements in domestic hwill be determined with DLA Strategic Materials. Targeted request opportunities to ensure that critical strategic materials are available place to efficiently produce strategic materials. Manufacturing tech specific Weapon System Program funds for industrial base qualific	capability that re-establishes sources for additional NSNs ntly added to DLA's Emerging R&D Requirements BAA for high strength carbon fibers. Additional targeted requirements for proposals will be conducted to address specific need from domestic sources and that process innovations are anologies and capabilities are expected to transition to Title	nts ds and in				
FY 2018 Plans: MAE will continue planning for the specific emulation technology in consonance with Customer and Agency requirements. MAE will consider the Microcircuits in addition to its traditional focus on Digital. Several earn quality/reliability requirements for establishing a basis for proceed the development and transition TTL-Compatible CMOS Microblem DLA's ability to re-establish sourcing of non-procurable microcircuit address several discontinued device families and will increase the NSNs. MAE will also continue development of additional emulation Application-Specific Integration Circuit (ASIC) and 256K Read-Online begin applying 350 nanometer emulation technology to specific page 1.	ontinue a major new thrust in emulation to address Linear efforts will address basic design, manufacturing, electrical fluct-oriented developments across the FYDP. MAE will also coircuit Emulation capability into full-scale production increit NSNs. The newly transitioned emulation capabilities will potential emulation production envelope by several hundre capabilities including development of a 1 million gate by and Random-Access Memory Emulation Capabilities. It	test so easing red				
	Accomplishments/Planned Programs Sub	ototals	-	16.923	17.10	

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.

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency									Date: May 2017			
0400 / 3					PE 0603680S I Manufacturing Technology Program (ManTech)				Project (Number/Name) 9 I 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

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Age	ency		Date: N	/lay 2017	
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603680S I Manufacturing Technology Program (ManTech)	9 I Imp		Name) nical and Log rly Industry ar	
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 participating in the pilots and validating the benefits of the knowledge based as		S			
FY 2018 Plans: MUST program will continue pilots, process reengineering and transition of th for implementations to be initiated in FY19.	e technology into the supply chain. Begin a sch	edule			
DLIR program will continue moving DLA from PDF Tech Data to Smart Data a technology to improve logistics data across the DLA Enterprise.	and Engineering Models and leveraging seman	tic			
Emerging Manufacturing Technologies addresses the opportunities to start no occur out of the budget cycle. It is a new start in FY18. Having an Emerging undertaking new technological advances without disrupting ongoing programs cut 12 to 24 months off project start-up lead-times. Saving the startup lead-tim into the hands of the warfighter earlier that would otherwise be the case and be technology sooner than would otherwise be the case. It also allows ongoing pactivity. SBIR phase III efforts (which can't be funded with SBIR funds) are a pathese funds, examples include emerging battery technologies, and technologies.	Technologies line allows DLA to get a head starts. In other programs DLA R&D has been able to the allows the Agency to get advanced technological to realize the benefits of implementing ne programs to maintain continuity of funding and prime example of activities that will be funded we	rt o gy w			
	Accomplishments/Planned Programs Sub		-	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.

PE 0603680S: *Manufacturing Technology Program (ManTec...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3:

PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D)

Date: May 2017

Advanced Technology Development (ATD)

tavariosa resimeregy Beverapment (1112)													
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.

PE 0603712S: Generic Logistics R&D Technology Demonst...
Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D)

Date: May 2017

- 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).

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	Defense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 3				R-1 Program Element (Number/Name) PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D) Technology Demonstrations (Log R&D) Project (Number/Name) 7 I 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.			

PE 0603712S: Generic Logistics R&D Technology Demonst...
Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	Logistics Agency	Date: M	lay 2017	
Appropriation/Budget Activity 0400 / 3	PE 0603712S I Generic Logistics R&D 7 Technology Demonstrations (Log R&D)	Project (Number/Name) 7 I 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 s current state simulation was compared to new potential redesign and compared to the current state for labor savings, reduction in Equipment (MHE).	s of the EDC. The most promising new designs were simulate fulfillment time/cycle, and reduction of Material Handling	d		
SDD completed the Warehouse Automation and Robotics Exploinitial ROM BCA. Subsequently, J6 assumed responsibility for the				
FY 2017 Plans: Planning Process will focus on initial capabilities of Supply chain ownership strategies for inventory and address ways to improve more effective inventory management. Collaborative efforts will be develop new projects for FY 2017 awards.	collaboration among DLA, its suppliers and its customers for			
Medical Logistics Network (MLN) will transition the Clinical Stand 3D Printing could be undertaken this year.	dardization application to sustainment. A new project in Medica	al		
SDD will complete the East Coast Distribution Center (EDC) student on lead-acid and new Lithium-Ion battery technology. Additionall Courses of Action (COAs) on deployable Hazardous Waste (HW	y, SDD will finalize an Exploratory Concept project and provide			
FY 2018 Plans: SDD will complete the lead-acid and Lithium-lon battery technolowaste (HW) disposal capabilities proof of concept.	ogy projects in support DLA Distribution and initiate a Hazardo	us		
The Medical Logistics Network will expand efforts in medical info combines information science, computer science and health care chain more efficiently.				
	Accomplishments/Planned Programs Subto	tals 3.471	2.371	4.06

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

N/A

Remarks

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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 I Generic Logistics R&D Technology Demonstrations (Log R&D)	Project (Number/Name) 7 I 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.		

PE 0603712S: Generic Logistics R&D Technology Demonst... Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 3			PE 0603712S I Generic Logistics R&D				Project (Number/Name) 8 I 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:			

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Exhibit N-2A, ND I & L I Toject 3d3tilleation. I 1 2010 Delense Logistics A	gency		Date.	nay 2011	
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D)	8 <i>I lm</i>	ct (Number/ proving Logis tics Process)	stics Process	es (formerly
B. Accomplishments/Planned Programs (\$ in Millions) T/Q efforts will include transition of the Cost of Quality in Procurement project Materials Project will be initiated. Additionally, new efforts will begin to improvisioning and to assess the potential impact of a standards-based appronew projects will be awarded as a result of collaborative planning efforts due	ove the acquisition of 3D technical data during each to simplify approval of substitute alloys. Add ring FY16. Collaborative efforts will be continued	ditional	FY 2016	FY 2017	FY 2018
the Procurement and T/Q Process Owners and their teams to develop new Medical Processes will continue to execute projects that support ACCM. As be undertaken this year.	•	could			
Strategic Distribution and Disposition (SDD) will support the Distribution Mo		valuate,			
FY 2018 Plans:					

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

Warfighter Impact-Based Parts Support.

Exhibit R-2A RDT&E Project Justification: FY 2018 Defense Logistics Agency

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

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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

5.413

5.236

3.849

Date: May 2017

Accomplishments/Planned Programs Subtotals

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 3				PE 0603712S I Generic Logistics R&D 9 I Emerg Technology Demonstrations (Log R&D) 9 (formerly				9 I Emerge	Number/Name) vent Logistics R&D Requirements Innovative Products & Services for omers)			
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. Accomplishment	ts/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018	
Title: Emergent Log	istics R&D Requirements	6.209	3.404	2.700	
Carbon Fiber, to allo DLA Additive Manufa parts. For Ultra-High produced, ultra-high	gement continued to fund the exploration of 2 areas, Additive Manufacturing and Sourcing Ultra High Modulus ow DLA to get a head start on the technological advantages it offers without disrupting ongoing programs. acturing (AM) partnered with the Military Services to accelerate product realization methods for AM producing Modulus Carbon Fiber, DLA completed materials characterization and qualification of a domestically modulus, carbon fiber system for Defense and National Security space systems in order to mitigate the and risks of this strategic material.				
improve specification	cus on providing additional alternatives for military unique fuels, working with the Service customers to ns and standards for fuel quality, engaging in modeling and simulation of the energy supply chain and e energy sources for Military Customers.				
DLA to get a head st	gement addresses the emerging technology opportunities that occur out of the budget cycle. This allows tart undertaking new technological advances without disrupting ongoing programs. In the past DLA R&D has to 24 months off the project starting lead-times. Saving the lead-time allows the Agency to begin to realize the				

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Aga Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D)	Project (Number/Name) 9 I Emergent Logistics R&D Requirements (formerly Innovative Products & Services to 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 for baseline programs. DLA and the Military Services will identify lists of candidate parts for AM to be established AM Memorandums of Agreement (MOA) with Naval Sea System Command (NAVAIR), and U.S. Army Research, Development and Engineeri MOAS with Kansas City National Security Campus (KCNSC), Air Force Mate Command (MARCORSYSCOM). These MOAs will allow the Agency to begir procurements activities. Energy Readiness will continue to focus on providing additional alternatives focustomers to improve specifications and standards for fuel quality, engage in and identifying alternative energy sources for Military Customers. FY 2018 Plans: SCM will continue to address the emerging technology opportunities that occupate the death of the project starting lead-times. Saving the lead-time implementing new technology sooner than evoluted otherwise be the case and programs. Augmented reality is an emerging technology that has potential to Thermoelectric Technology project to improve the current thermoelectric heatincreased heating range, reduced maintenance requirements, and a longer streplace the existing Space Heater Convective standard heaters currently stocheater that reduces the logistics footprint and satisfies the space heating requirements. In FY18, the AM project will be funded under PE 0603680S / Manufacturing Industrial Base Manufacturing Processes (formerly Material Availability). This activity for this program. ERP will continue to focus on providing additional alternatives for military unit to improve specifications and standards for fuel quality, engage in modeling a time of the program in t	e used for vendor solicitation. DLA R&D has a Command (NAVSEA), Naval Air Systems ng Command (RDECOM), and currently develouriel Command (AFMC) and Marine Corps Systems the transition of AM as a new alternative into it for military unique fuels, working with the Service modeling and simulation of the energy supply of the unique fuels. This allows DLA to go programs. In the past DLA R&D has been also allows the Agency to begin to realize the benefit maintain continuity of funding and activity for based advance to the forefront. Complete the Advance are technology so it is more fuel-efficient, has a ervice life. The Advanced Thermoelectric Heater can be called at DLA, and will provide DoD a single, versuirements of expeditionary forces. Technology Program (ManTech) Project 7 - Impare alignment will maintain continuity of funding and que fuels, working with the Service customers	ping ems s e chain get a ole to is of seline ed in er will satile	1 1 2010	F1 2017	F1 2010
identifying alternative energy sources for Military Customers.	Accomplishments/Planned Programs Sub	totalo	6.209	3.404	2.70
	Accomplishments/Flanned Flograms Sub	iolais	0.209	3.404	2.70

PE 0603712S: *Generic Logistics R&D Technology Demonst...* Defense Logistics Agency

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R-1 Program Element (Number/Name) PE 0603712S I Generic Logistics R&D Technology Demonstrations (Log R&D)	Project (Number/Name) 9 I Emergent Logistics R&D Requirements (formerly Innovative Products & Services for DLA Customers)
PE 0603712S I Generic Logistics R&D	9 I Emergent Logistics R&D Requirements (formerly Innovative Products & Services for

PE 0603712S: Generic Logistics R&D Technology Demonst... Defense Logistics Agency

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

PE 0603713S I Deployment and Distribution Enterprise Technology

Date: May 2017

Advanced recrinology Developine	iii (AID)											
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-

PE 0603713S: Deployment and Distribution Enterprise T... Defense Logistics Agency

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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.

FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
29.888	0.000	0.000	-	0.000
29.888	0.000	0.000	-	0.000
0.000	0.000	0.000	-	0.000
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
-	-			
	29.888 29.888	29.888 0.000 29.888 0.000	29.888 0.000 0.000 29.888 0.000 0.000	29.888 0.000 0.000 - 29.888 0.000 0.000 -

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.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency											Date: May 2017			
Appropriation/Budget Activity 0400 / 3					PE 060371	am Elemen 13S <i>I Deploy</i> <i>Technology</i>	ment and <i>E</i>	•	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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency										Date: May 2017				
Appropriation/Budget Activity 0400 / 3						PE 0603713S I Deployment and Distribution 2 I					Project (Number/Name) 2 I 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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency											Date: May 2017		
Appropriation/Budget Activity 0400 / 3					PE 060371	am Elemen 3S / Deploy Technology	/ment and D	•	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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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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 I Deployment and Distribution Enterprise Technology					Project (Number/Name) 4 I End-to-End Visibility			
COST (\$ in Millions) Prior Years FY 2018 FY 2018 Base						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

PE 0603713S: Deployment and Distribution Enterprise T... Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Loc	PE 0603713S I Deployment and Distrib Enterprise Technology				
Appropriation/Budget Activity 0400 / 3	PE 0603713S I Deployment and D				
E. Performance Metrics		·			
schedules and deliverables stated in the statements of work. >80%	6 transition rate of proven technologies to increa				

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су		Date: May 2017					
Appropriation/Budget Activity		_	am Elemen	•	• `	(Number/Name)						
0400 / 3	73						PE 0603713S I Deployment and Distribution 5 I Dist Enterprise Technology					asting
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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су			Date: May 2017				
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S I Deployment and Distribution Enterprise Technology				Project (Number/Name) 6 I 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 Pr	ograms 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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	ncy				Date: May 2017			
Appropriation/Budget Activity		R-1 Progra	am Elemen	t (Number/	Name)	Project (Number/Name)						
0400 / 3						PE 0603713S I Deployment and Distribution Enterprise Technology				7 I 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.

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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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 I Deployment and Distribution Enterprise Technology				Project (Number/Name) 8 I 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

complichments/Dianned Drearems (¢ in Milliane)

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	1
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.				
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PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Log	Date: May 2017					
Appropriation/Budget Activity 0400 / 3	Project (Number/Name) 8 I 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 Transportation for the 21st Century Theater were transferred to a single support auditability, increase management efficiency, and reduce according to the support auditability.						

Accomplishments/Planned Programs Subtotals

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.

PE 0603713S: Deployment and Distribution Enterprise T... **Defense Logistics Agency**

16.492

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 I Deployment and Distribution Enterprise Technology				Project (Number/Name) 9 / Cyber								
COST (\$ in Millions) Prior Years FY 2018 FY 2017 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

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Exhibit R-2A, RDT&E Project Justification: FY 2018 De	efense Logistics Agency	Date : May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S I Deployment and Distribution Enterprise Technology	Project (Number/Name) 9 / Cyber
C. Other Program Funding Summary (\$ in Millions)		
<u>Remarks</u>		
D. Acquisition Strategy N/A		
	nd include measures identified in the metric project plans. Project cork. >80% transition rate of proven technologies to increase force piccs/supply chain operations.	

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	ncy					Date: May 2017		
Appropriation/Budget Activity 0400 / 3		R-1 Program Element (Number/Name) PE 0603713S I Deployment and Distribution Enterprise Technology				Project (Number/Name) 10 / Global Access						
COST (\$ in Millions) Prior Years FY 2016 FY 2017 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 shipto-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	-

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Exhibit R-2A, RDT&E Project Justification: FY 2018 De	efense Logistics Agency	Date: May 2017
Appropriation/Budget Activity 0400 / 3	R-1 Program Element (Number/Name) PE 0603713S I 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		
	nd include measures identified in the metric project plans. Project co tatements of work. >80% transition rate of proven technologies to in acy of DoD logistics/supply chain operations.	

PE 0603713S: *Deployment and Distribution Enterprise T...* Defense Logistics Agency

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3:

PE 0603720S I Microelectronics Technology Development and Support (DMEA)

Date: May 2017

Advanced Technology Development (ATD)

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.

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD)

PE 0603720S I Microelectronics Technology Development and Support (DMEA)

Date: May 2017

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

PE 0603720S: *Microelectronics Technology Development* ... Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency Appropriation/Budget Activity 0400: Research, Development, Test & Evaluation, Defense-Wide I BA 3: Advanced Technology Development (ATD) Date: May 2017 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	<u></u>	
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.

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency										Date: May	2017	
0400 / 3						20S I Microe	•	Technology	Project (No. 1 / Technol		,	
COST (\$ in Millions)							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			

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logi	Date: May 2017			
Appropriation/Budget Activity 0400 / 3	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, \$ and \$40M for the HH-60G Pave Hawk Helicopter. In keeping with the the process of extending its fabrication capability to smaller node siz facility.	e rapid pace of microelectronics technology, DMEA contin	nued		
FY 2017 Plans: DMEA will continue to design, develop, and demonstrate microelectr to solve operational problems. DMEA will apply advanced technolog the newest asymmetric threats and to modernize aging weapon syst years by Combatant Commands (CCMDs) and Special Operations he their demands for DMEA's unique capability to provide quick technic these increases, DMEA will continue to add capacity and capability infrastructure, continue the installation of the cleanroom in the 200m techniques to inspect and analyze circuits, and adapt tools and proceeding the process of the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door the Component is Army 28%, Navy/Marines 27%, AF 33%, Other Door th	ies to add performance enhancements in response to iems. The increased missions seen in the last several nave caused those organizations to dramatically increase al solutions to immediate operational needs. To meet by recapitalizing and modernizing aging microelectronic im facility, extend and upgrade process IP, develop advarcesses to detect increasingly sophisticated counterfeit valued at approximately \$1.5B. The anticipated distribution	nced		
FY 2018 Plans: DMEA will continue to design, develop, and demonstrate microelectrosolve operational problems. DMEA will apply advanced technologisthe newest asymmetric threats and to modernize aging weapon syst years by Combatant Commands (CCMDs) and Special Operations in their demands for DMEA's unique capability to provide quick technic these increases, DMEA will continue to add capacity and capability to infrastructure, extending and upgrading process IP, developing advatools and processes to detect increasingly sophisticated counterfeit requick turn solutions on which CCMDs and Special Operations can reason facility, and will begin installation of semiconductor fabrications.	ies to add performance enhancements in response to tems. The increased missions seen in the last several nave caused those organizations to dramatically increase all solutions to immediate operational needs. To meet by recapitalizing and modernizing aging microelectronic anced techniques to inspect and analyze circuits, and adamicroelectronics to ensure a secure supply chain, all to mely. DMEA will complete installation of the cleanroom in the	pting eet		
<i></i>	Accomplishments/Planned Programs Subt	otals 37.659	44.912	133.074

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

N/A

Remarks

N/A

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency											2017	
0400 / 3						20S I Microe	•	Technology	Project (No. 2 / Trusted		ne)	
COST (\$ in Millions)					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 si

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			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	Logistics Agency	Date	: May 2017		
Appropriation/Budget Activity 0400 / 3	Project (Number 2 / Trusted Found	t (Number/Name) sted Foundry			
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018	
products to include newly available leading edge technologies a programs. Expanded a line of trusted catalog components that to ensure the Department has Trusted Access to leading edge s capability for the inspection and analysis of application-specific efficiency, accuracy, and applicability to multiple processes.	can be purchased by Defense contractors. Continued activities semiconductor technologies. Continued the development of a				
FY 2017 Plans: Continue facilitating the availability of Trusted state-of-the-art seresearch organizations through the DMEA Trusted Access Progfor the inspection and analysis of application-specific integrated for efficiency, accuracy, and applicability to multiple processes. components and services needed for appropriate defense syste available leading edge technologies and other key specialty procatalog components that can be purchased by Defense contract Access to leading edge semiconductor technologies. Continue gate arrays (FPGAs), and complete related technology developed inspection and analysis of application-specific integrated circuits and applicability to multiple processes.	ram office contracts. Continue the development of new capabi circuits (ASICs) and continuously refine the utilized methods Enhance the cadre of trusted suppliers for the critical trusted ms. Enhance Trusted Microelectronics products to include new cesses required by Department programs. Expand a line of trustors. Continue activities that ensure the Department has Truste efforts to facilitate the availability of Trusted field-programmablement efforts. Continue the development of a capability for the	vly sted ed e			
FY 2018 Plans: Continue facilitating the availability of Trusted state-of-the-art seresearch organizations through the DMEA Trusted Access Prog the critical trusted components and services needed for appropriate include newly available leading edge technologies and other Expand a line of trusted catalog components that can be purchathe Department has Trusted Access to leading edge semiconduthe inspection and analysis of application-specific integrated circlefficiency, accuracy, and applicability to multiple processes.	ram office contracts. Enhance the cadre of trusted suppliers for itate defense systems. Enhance Trusted Microelectronics prodicts specialty processes required by Department programs. Used by Defense contractors. Continue activities that ensure ctor technologies. Continue the development of a capability for cuits (ASICs) and continuously refine the utilized methods for	r ucts			
	Accomplishments/Planned Programs Subto	otals 39.17	73 52.914	86.72	
		EV 2017			
	FY 2016	1 1 2017			

PE 0603720S: *Microelectronics Technology Development* ... Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen	Date: May 2017		
Appropriation/Budget Activity	Project (N	umber/Name)	
0400 / 3	PE 0603720S I Microelectronics Technology	2 I Trusted	' Foundry
	Development and Support (DMEA)		

	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

PE 0603720S: *Microelectronics Technology Development ...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 5:

PE 0605070S / DoD Enterprise Systems Development and Demonstration

Date: May 2017

System Development & Demonstration (SDD)

· · · · · · · · · · · · · · · · · · ·												
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

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

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

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).

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 5					PE 060507	am Elemen 70S I DoD E ent and Den	nterprise S	•	Project (N 4 / Defense (DISS)		ne) on System fo	r 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
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, 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.			

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

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Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S I DoD Enterprise Systems Development and Demonstration	_	roject (Number/Name) I Defense Information System for Securi IISS)				
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018		
Further, the 3 May 2012 Deputy Secretary of Defense Memo "Do	• • • • • • • • • • • • • • • • • • • •						
consolidated all DoD CAF into one consolidated DoD CAF responsorable Suitability and HSPD-12 adjudications. The DISS (CA)	· · · · · · · · · · · · · · · · · · ·						
Achieving the above goals will significantly enhance the operation	nal readiness of the national security community and the Fe	ederal					
government. It will decrease the time required to get an individual	· · · · · · · · · · · · · · · · · · ·	Juciui					
reinforce reciprocity throughout the federal community by eliminal adjudicative decisions and by making available to all agencies as	· · · · · · · · · · · · · · · · · · ·	ıg					
	ajudicative determinations of the rederal government.						
FY 2016 Accomplishments:							
Completed Seaside, CA Phase I infrastructure build in preparat							
OPM tiered case ingest successfully tested across all Legacy C	CATS versions						
Developed DISS Portal training artifacts							
Received final draft DISS hierarchy structures for the Compone	nts and WHS						
Completed End User Evaluation (EUE)							
System categorized and security controls identified							
The DISS System of Record Notice (SoRN) was promulgated							

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

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency

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.

Accomplishments/Planned Programs Subtotals

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Date: May 2017

8.299

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defen	se Logistics Agency	Date : May 2017
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S I DoD Enterprise Systems Development and Demonstration	Project (Number/Name) 4 I Defense Information System for Security (DISS)
sustainment of the DISS Capabilities. DISS development cor	l employ contract types as directed by the agency contracts portractors employ an agile development methodology to allow for cycle while meeting delivery requirements as prescribed by the tal capabilities IAW the program's acquisition approach.	or a flexible approach that incorporates user
E. Performance Metrics		
N/A		

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 D	efense Log	istics Agen	су					Date: May	2017	
0400 / 5 PE 06				R-1 Program Element (Number/Name) PE 0605070S I DoD Enterprise Systems Development and Demonstration Project (Number/Name) 9 I Enterprise Funds Distribution (E				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:			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Lo	Date: May 2017				
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605070S I DoD Enterprise Systems Development and Demonstration	Project 9 / En	n (EFD)		
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
 Implemented onto EFD the BRAC and non-general fund account efforts for implementation include requirements review, functional conversion, and testing. Provided training to the end users who are responsible for the BF Conducted transition activities in preparation for DFAS to sustain Converted the funding data for years prior to FY16 for the Defense Phase 2 efforts. Deployed Software upgrade Momentum 7.3 to current user base 	and technical analysis, system configuration/development RAC and non-general funds accounts. In the system. Is a Organizations that were implemented onto EFD as part	, data			
FY 2017 Plans: • Begin implementation of core EFD Phase 2 functionality and dete • Determine strategy for development and deployment of remainde •					
FY 2018 Plans: • Continue development and deployment of EFD Phase 2 requires	ments based on user group migration strategy.				

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.

PE 0605070S: DoD Enterprise Systems Development and D... **Defense Logistics Agency**

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Accomplishments/Planned Programs Subtotals

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3.202

5.660

6.266

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 I DoD Enterprise Systems Development and Demonstration Project (Number/Name) 11 I Next Generation Resource Management System (NGRMS)				Resource					
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

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen	Date: May 2017	
1	PE 0605070S I DoD Enterprise Systems	Project (Number/Name) 11 I Next Generation Resource Management System (NGRMS)

2010-10pmont and 2011-10pmont and	anagement cycl	(11011110)	
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 Subto	als 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.

PE 0605070S: *DoD Enterprise Systems Development and D...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity R-1

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

Date: May 2017

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.)

PE 0605080S: *Defense Agency Initiatives (DAI) - Finan...* Defense Logistics Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics	s 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) - Fi	nancial System
PB18 increase in funding to complete development efforts.		

PE 0605080S: *Defense Agency Initiatives (DAI) - Finan...*Defense Logistics Agency

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

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

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	Logistics Agency	Date: N	May 2017	
Appropriation/Budget Activity 0400 / 5				DAI) -
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
 Conducted a service provider, independent audit, SSSAE 16 aprovider assertion packages supporting the SSAE 16 SOC 1 RePMO will use the DECCs SSAE 16 SOC 1 Report as the basis for use in their audits. DECCs maintain all the operations software and their audits. DECCs maintain all the operations software are conducted BEA compliance assessment against the current of Department's Integrated Business Framework – Data Alignment engineering for Rel 4 and October 2017 deploying Defense Age. Resolved critical software errors and critical statutory/regulator identified during BPR, BEA compliance assessment and the Audit Supported the DoD Information Assurance Certification and Add (RMF) process maintaining activity to support actions included in Test of Design/Test of Effectiveness. The submission package. Conducted testing to include: unit testing on developed items; development testing that includes a SIT and UAT; Rel 3 develop assessment event in conjunction with DOT&E following the annu. Conducted contract renewal competitions and exercise options billing. Deployed Rel 2 to some of the October 2017 deploying Defense. Conducted October 2017 deploying Defense Agencies' implementation. Continued the implementation of GRC capabilities delivered in Developed Rel 3 Budget Formulation and Direct Treasury Disk 	eport and resolve any Notification of Findings (NOFs). The Dor its input for the annual DLA SOC 1 Report that Agencies of and hardware in the suite. ersion (v10.0 as of September 8, 2015), document results in Portal (IBF-DAP) portal and conduct Business Process Rencies. Ty enhancements that impact operations and incorporate characteristic differences (DIACAP)/ Risk Management Framework the DAA required POA&M including an independent FISCA will result in a DAA decision to award an ATO. The monthly Rel testing that includes regression; annual Relevant and Relevant at using Defense Agencies. The one existing contracts and monitor contractor performance and Eagencies' for Time and Labor. The nentation activities including data conversion, BPR and workfor Rel 2. The possibilities of the process of the pr	Al vill the nges k M tional nd	F1 2017	F1 2010
 (CCWG) approved changes and develop ability to send/receive Standards (PRDS/PDS). Conducted an annual Acquisition In-Process Review (IPR) with Oversaw the operations of the DISA DECCs at Ogden, UT (Process Tevers) application servers and whost site related IA and internal controls. DECC services are goton Maintained currency with existing Federal, DFAS and target English (SAM) web services, as SAM assumes the functionality of the Foundation of Maintained a sufficient Information Assurance/cybersecurity poton support actions included in the Designated Approval Authority currency of documentation in Enterprise Mission Assurance Suppoperational and application software currency and security patch 	In the MDA. oduction and T&D to include training) and Columbus, OH (Columbus and T&D to include training) and Columbus, OH (Columbus and Everaging the DECC for infrastructure support a verned by an annually negotiated Service Level Agreement (Interprise systems including the System for Award Management (Integrated Acquisition Environment (IAE) systems. Seture and support the DIACAP/ RMF process maintaining active required actions included in the POA&M including maintaining oport Service (EMASS) portal. This includes maintaining the	nd SLA). ent ctivity		

PE 0605080S: *Defense Agency Initiatives (DAI) - Finan...* Defense Logistics Agency

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 I Defense Agency Initiatives (DAI) - Financial System	Project (Numbe 1 <i>I Defense Agel</i> <i>Financial Systen</i>	ncy Initiatives (DAI) -		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018	
 Maintained DAI master data leveraging feeds from the authorita Maintained the program's DODAF views in accordance with DL Ensured sufficient administer all of the databases: production; Maintained the system configuration in accordance with the DL CCWG. Maintained currency with functional policy with regard to function Maintained the technical side of the system including the intern systems leveraging DLA Transaction Services as well as establish Maintained and monitor user roles and responsibilities at the systemial of the system in the system including the intern systems leveraging DLA Transaction Services as well as establish Maintained and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and monitor user roles and responsibilities at the system including the interned and responsibilities at the system i	A guidance and in DLA systems. T&D/training; and COOP. A J6 Enterprise Configuration Management Plan (ECMP) and and data standards. al processes and the operation of several interfaces with extended Federal Enterprise system web services.	ernal			
FY 2017 Plans: In FY 2017, the DAI PMO will Deploy Rel 3 to current Defense Agencies and to full financial of Inspector General, Director of Operational Test & Evaluation, Defluman Resources Activity. DAI PMO will develop Rel 4 Re-Sale Accounting and Defense of Materials as well as any necessary RICE-FW objects. Conduct pre-Rel 4 deployment planning and BPR, with new Ageondoctron Conduct a service provider, independent audit, SSSAE 18 and assertion packages supporting the SSAE 18 Service SOC 1 Report as the Agencies will use in their audits. DECCs maintain all the operation Conduct BEA compliance assessment against the current version Department's IBF-DAP portal and conduct Business Process Releasing Resolve critical software errors and critical statutory/regulatory identified during BPR, BEA compliance assessment and the Audientified during BPR, BEA	Working Capital Fund accounting, work instructions, training lencies, Rel 3 Agency mocks and Rel 4 SE technical reviews support the Audit Readiness Office in developing service proport and resolve any identified NOFs. The basis for its input for the annual DLA SOC 1 Report that ons software and hardware in the suite. It is input for newly joining Defense Agencies. The engineering for newly joining Defense Agencies. The enhancements that impact operations and incorporate change the defense included in the DAA required POA&M resulting in anthly Rel testing that includes regression; annual Rel mental testing including a SIT and UAT; as well as an operation of the property of the p	ovider ges a			

PE 0605080S: *Defense Agency Initiatives (DAI) - Finan...*Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defens	e Logistics Agency	Date: N	/lay 2017	
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S I Defense Agency Initiatives (DAI) - Financial System	Project (Number/Name) 1 I 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 billing. Conduct October 2018 deploying Defense Agencies' impleme preparation. Continue the implementation of GRC capabilities delivered in Develop, test and release Electronic Funds Distribution (EFD) Conduct an annual Acquisition IPR with the MDA. Oversee the operations of the DISA DECCs at Ogden, UT (PThe PMO operates database servers, application servers and host site related IA and internal controls. DECC services are geting in the functionality of the Federal IAE systems. Maintain a sufficient Information Assurance/cybersecurity posto support actions included in the Designated Approval Authoric currency of documentation in EMASS. This includes maintaini patches. Maintain DAI master data leveraging feeds from the authoritation in Emailmentation in Emailmentation in accordance with DL. Ensure sufficient administer all of the databases: production; Maintain the program's DODAF views in accordance with the DL. Maintain the system configuration in accordance with the DL. Maintain currency with functional policy with regard to function. Maintain the technical side of the system including the internative systems leveraging DLA Transaction Services as well as estated. Maintain and monitor user roles and responsibilities at the system in the program of the pr	entation activities including data conversion, BPR and workfor Rel 2 based on audit feedback.) to DAI production. roduction and T&D to include training) and Columbus, OH (Columbus servers, leveraging the DECC for infrastructure support a coverned by an annually negotiated Service Level Agreement (serprise systems including the SAM web services, as SAM assisture and support the DIACAP/ RMF process maintaining activity required actions included in the POA&M including maintaining the operational and application software currency and secutive data sources. A guidance and in DLA systems. T&D/training; and COOP. A J6 ECMP and the DAI CCWG. In and data standards. It processes and the operation of several interfaces with exterpolished Federal Enterprise system web services. In the component level.	OOP). and (SLA). sumes vity ing urity		
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 un Estate Defense Working Capital Fund (DWCF) capabilities. St Independent Operational Assessment. • Work instructions and training materials.		3		

PE 0605080S: *Defense Agency Initiatives (DAI) - Finan...*Defense Logistics Agency

		_ a, _ a				
Appropriation/Budget Activity 0400 / 5	R-1 Program Element (Number/Name) PE 0605080S I Defense Agency Initiatives (DAI) - Financial System	Project (Number/Name) 1 I Defense Agency Initiatives (E Financial System)			(DAI) -	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018	
 Conduct Follow-on Test and Evaluation event with using Agencies assessments. Support the FM & time/labor for over 49k users at over 23 Agencies Support the DoD Information Assurance Certification and Accredita included in the Designated Authorizing Authority required Plan of Act of Design/Test of Effectiveness to result in a DAA decision to award Continue to implement the Governance, Risk and Compliance capa Access, Prevention & Transactions supporting audit findings, recomm Maintain the technical operation including: application of DISA Section for servers operating systems, middleware & applications including penclaves; & the daily operation of several interfaces with external systems at the design of the Secretary and a Cooperative Vulnerability and Penet Obtain or maintain an interim Interoperability Certification or an Aut The Program will also perform developmental, operational and Cyb of the Secretary of Defense oversight. The Defense Logistics Agence conduct the annual FFMIA and SSAE 18 assessments and conduct to the conduct of the conduct of the conduct the annual FFMIA and SSAE 18 assessments and conduct the conduct of the conduct	s, Field Activities and orgs. Ition Risk Management Framework process to support a tions and Milestones including an independent FISCAM an Authority to Operate. Indicates by expanding Enterprise controls: Configuration mendations & CAPs. It is a CAPs. It is a CAPs and in the control of the	Test , ncy omic				
	Accomplishments/Planned Programs Sul	ototals	30.568	30.457	24.43	

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

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Date: May 2017

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

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Ager	Date: May 2017	
Appropriation/Budget Activity	R-1 Program Element (Number/Name) Project (Number/Name	
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	(DAI) - Financial System	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:

) - Finan... UNCLASSIFIED
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Exhibit R-2A , RDT&E Project Justification : FY 2018 Defense Logistics Agen	Date: May 2017	
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
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	(DAI) - Financial System	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

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

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

Appropriation/Budget Activity

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R-1 Program Element (Number/Name)

PE 0605080S I Defense Agency Initiatives (DAI) - Financial System

Project (Number/Name)

1 / Defense Agency Initiatives (DAI) -

Date: May 2017

Financial System)

Product Developmer	nt (\$ in M	illions)		FY 2	2016	FY 2	2017		2018 ase	FY 2		FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contrac
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	-

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Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Logistics Agency

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)			FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	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)			FY 2016		FY 2017		FY 2018 Base		FY 2018 OCO		FY 2018 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	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 2	2017	FY 2018 Base		2018 CO	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

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Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Logistics Agency **Date:** May 2017 Appropriation/Budget Activity R-1 Program Element (Number/Name) Project (Number/Name) PE 0605080S I Defense Agency Initiatives 1 I Defense Agency Initiatives (DAI) -0400 / 5 (DAI) - Financial System Financial System) **Revised INC 2 Schedule** Quarter/FY Q1/FY14 Q3/FY14 Q4/FY14 Q1/FY16 Q2/FY16 Q3/FY16 Q4/FY16 Q1/FY17 Q3/FY17 Q1/FY18 Q1/FY19 Q2/FY19 Risk Operations & **Phases Development & Deployment** Reduction Support £Ď MS B Decision FDD IPR LFD IPR ATP R 1 Fielding Reviews R 2/3 Dev Logistics Systems Engineering (Tech SIT UAT PC A PIR Reviews) Development Allocation B R 1.0 Workforce Prep SSAE 16 Assessment Developmental Test BEA/FFMIA Operational Test R.1 OA Report Cybersecurity Data Conversion Release Deployments: Rel 1 Rel 2 Rel 3 Rel 4 R 1.0 - R12 - T&L Automation & P2P Efficiencies FF Go Live DCMA & DMEA R 2.0 - GRC & Grants Financial Management DOMA, DODEA DAU & R 3.0 - Budget Formulation & Treasury Direct Disbursing R 4.0 - Revolving Fund Accounting 508: Section 508/Disability Test CVPA: Cooperative Vulnerability & Penetration DIT: Developmental Integrated Test DWCF: Defense Working Capital Fund FCA: Functional Configuration Audit FDD: Full Deployment Decision JITC: Joint Interoperability Test Command MS: Milestone OA: Operational Assessment OTA: Operational Test Authority REG: Regression Test RMF: Risk Management Framework SFIS-CA: Standard Financial Information USSGL: United States Standard General Ledger UT: Unit Test AA: Adversarial Assessment ACAS: Assured Compliance Assessment Assessment DAU: Defense Acquisition University WHS: Washington Headquarters Service DCAA: Defense Contract Audit Agency Compliance Assessment DCAA: Defense Contract Audit Agency DCFO: Deputy Chief Financial Officer DCMA: Defense Contract Management Ag DHRA: Defense Human Resources Activity DMEA: Defense Microelectronic is Activity DODEA: DoD Education Activity 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) Compliance Assessment SIT: Systems Integration Test SOD: Segregation of Duties SRR: Software Requirements Review SSAE 16: Statement of Standards for an Attestation Engagement ATO: Authority to Operate (Includes Production & COOP) ATP: Authority to Proceed Decision Review BEA: Business Enterprise Architecture Increment Approach Information Act FOT&E: Follow on Test and Evaluation GRC: Governance, Risk and Compliance Updated April 18, 2017 Attestation Engagement Stds: Standards T&D: Test and Development T&L: Time & Labor TRR: Test Readliness Review UAT: User Acceptance Testing CDR: Critical Design Review CEVA: Cyber Economic Vulnerability DODIG: DoD Inspector General DOT&E: Director Operational Test and IA: Information Assurance IOC: Initial Operational Capability IOT&E: Initial Operational Test & PERF: Performance Test *Note: WHS deployment includes OSD Secretariat offices, Pentagon Force PIR: Post Implement PROD: Production Protection Agency, Defense Test Resources Management Center (DTRMC), Development DSCA: Defense Security Cooperation Agency DT: Development Test Assessment COOP: Continuity of Operations Testing R: Release R12: Oracle E-Business Suite, Release 12 Defense Legal Services Agency (DLSA) and US Court of Appeals For Armed

Exhibit R-4A, RDT&E Schedule Details: FY 2018 Defense Logistics Agency			Date: May 2017
1	1	-,	umber/Name)
0400 / 5	PE 0605080S I Defense Agency Initiatives	1 I Defense	e Agency Initiatives (DAI) -
	(DAI) - Financial System	Financial S	System)

Schedule Details

	Sta	art	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

Appropriation/Budget Activity R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 5:

PE 0605090S I Defense Retired and Annuitant Pay System (DRAS)

Date: May 2017

System Development & Demonstration (SDD)

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 & 	-	-	1.578	-	1.578
production hosting environments					
 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).

PE 0605090S: *Defense Retired and Annuitant Pay System...* Defense Logistics Agency

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R-1 Line #131

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics	s 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 / Defense Retired and Annuitant Pay S	System (DRAS)
PB18 Increase to continue the development of the functional and sys	stem requirements of DRAS2.	

PE 0605090S: *Defense Retired and Annuitant Pay System...*Defense Logistics Agency

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

B. Accomplishments/Planned Programs (\$ in Millions)

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.

Title: Defense Retired and Annuitant Pay System (DRAS) 2	9.785	7.949	13.475
FY 2016 Accomplishments: -Achieved Acquisition Lifecycle Milestone BIssued a Task Order to for Build 1 and 2 requirements review and Build 1 system developmentObtained additional Oracle PeopleSoft COTS software licensesUtilized Transaction Services for system interface activitiesEstablished Data Management environment in MilCloud and begin legacy data cleansing activitiesCompleted Build 1 configuration and design activities and began Build 1 development.			
-Issue a Task Order to finalize Build 3 requirements, begin Build 2 and 3 development, including Conference Room Pilot demonstrationsObtain additional COTS software licensingContinue development of system interfaces and performance testingEstablish 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 TestingEstablish production hosting environment and perform Cyber Defense Security activities.			
Accomplishments/Planned Programs Subtotals	9.785	7.949	13.475

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FY 2016

FY 2017

FY 2018

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics A	Date: May 2017			
Appropriation/Budget Activity	Project (Number/Name) 1 I Defense Retired and Annuitant Pay			
0400 / 5	I 5 PE 0605090S I Defense Retired and			
	Annuitant Pay System (DRAS)	System 2 (DRAS)		
C. Other Drawer Funding Summer (fin Millions)				

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

PE 0605090S: Defense Retired and Annuitant Pay System... Defense Logistics Agency

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Logistics Agency

Project Cost Totals

Appropriation/Budget Activity

0400 / 5

R-1 Program Element (Number/Name)
PE 0605090S I Defense Retired and

13.475

Annuitant Pay System (DRAS)

Project (Number/Name)

13.475

1 I Defense Retired and Annuitant Pay

Date: May 2017

System 2 (DRAS)

Product Developme	ent (\$ in M	illions)		FY:	2016	FY 2	2017		2018 ise		2018 CO	FY 2018 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	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	FY:	2017		2018 ise		2018 CO	FY 2018 Total	Cost To	Total Cost	Target Value of Contract

7.949

Remarks

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

9.785

18.030

Exhibit R-4, RDT&E Schedule Profile: FY 2018 Defense Logistics Agency **Date:** May 2017 R-1 Program Element (Number/Name) Appropriation/Budget Activity Project (Number/Name) 1 I Defense Retired and Annuitant Pay 0400 / 5 PE 0605090S I Defense Retired and Annuitant Pay System (DRAS) System 2 (DRAS) DELIVER THE RIGHT SOLUTION ON TIME, EVERY TIME DRAS2 Top Level **Key Events EMD** PROD / DEPLOY Operations & Support FY15 Fiscal Year FY17 FY18 FY19 FY20 FY16 Q2 | Q2 Q3 Q1 Q2 Q3 Q4 Q2 | Q3 Q4 Q1 Q2 | Q3 Q4 Q2 Q3 Q4 Q1 Q4 Quarter 01 Q4 A AFD **≜**MSB △ MS C ○PIR/ISR Acquisition SI Award JITC Contracting MSB DRAFT LCSP Logistics Life Cycle Sustainment MS C LCSP GAP/Design Capability Requirement Traceability Matrix Functional Analysis RR/SVR Requirements PDR2 PRR/OTRR Proto CRP2 System Engineering SEP TRR Reviews OTE SIT JITC IOP OProto CRP4 Build 1 SQT Production & UAT Development OProto CRP6 Build 1 - 3 Build 2 T-CDR Cut Over T-PDR DTE Test & Evaluation Build 3 TMP Parallel Ops TEMP Update TEMP Update TEMP Update Transition Planning Information Assurance Cyber Security ATO/ATC Task Timeline MS B - Milestone B MS C - Milestone C FD - Full Deployment IATT - Interim Authority To Test ATO/ATC - Authority To Operate/Authority to Connect TMRR △ Milestone Decision □ Technology Maturation and Risk Reduction EMD - Engineering and Manufacturing Development PROD/DEPLOY - Production and Deployment Development SI -(Planned) System Integrator TO - Task Order SRR - System Requirements Review SFR - System Functional Review PDR - Preliminary Design Review CDR - Critical Design **Decision Point** Partial Progress Review - T-PDR Tailored Preliminary Design Review - T-CDR Tailored Critical Design Review (Build 1-3) OTRR - Operational Test Readiness Review PRR Production Readiness Review ISR - In Service Review SEP - System Engineering Plan TMP - Test Management Plan TEMP - Test & Evaluation Master Plan SAT -Indicator Completed System Acceptance Testing SIT - System Integration Testing TRR - Technology Readiness Review SVR - System Verification Review SQT - System Qualification **DocumentReview** Testing UAT - User Acceptance Testing - DTE - Developmental Test & Evalution. (SwQT) - Software Quality Testing - Regression, System Integration, Compliance and Functional User Testing) - JITC - Joint Interoperability Test Command Proto CRP - Prototype Conference Room Pilot 2, 4, 6 WARFIGHTER FIRST - PEOPLE & CULTURE - STRATEGIC ENGAGEMENT - FINANCIAL STEWARDSHIP - PROCESS EXCELLENCE

PE 0605090S: *Defense Retired and Annuitant Pay System...* Defense Logistics Agency

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



Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 6:

PE 0605502S I Small Business Innovative Research (SBIR)

Date: May 2017

RDT&E Management 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
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 material 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		
					1 / Small B	Number/Name) Business Innovative Research						
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

PE 0605502S: Small Business Innovative Research (SBIR... Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Lo	ogistics Agency		Date: N	1ay 2017	
Appropriation/Budget Activity 0400 / 6	R-1 Program Element (Number/Name) PE 0605502S I 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/STTF new Phase I projects and 1 Direct to Phase II project. The 16.3 so is expected to produce 4 new Phase I projects. In FY16, the progra OSD/OSBP funding (\$8M) documented on DD form 1144. Upon compete for Phase II awards.	licitation yielded 4 new Phase I projects and the 16.3 solic am awarded 6 new Phase II awards. All Phase II awards t	itation utilized			
DLA STTR: Executed of all active Phase II STTR projects. DLA ST Upon completion, all active Phase I projects have the opportunity to		unds.			
DMEA SBIR: Completed feasibility studies for quantum cryptograph for rapid and agile detection of counterfeit microelectronics by illuntemission signature. Completed a feasibility study for high-resolution feasibility studies for the analysis of integrated circuits using limited efficiency, high-resolution x-ray system for inspecting integrated circuits.	ninating devices with RF energy and acquiring the subseq on x-ray microscopy of microelectronic devices. Completed d x-rays. Completed prototype development for a high-	uent			
DMEA STTR: Completed feasibility studies for developing a ZnS s at 9KeV, and for developing a new sensor for 9KeV high resolution		rcuits			
FY 2017 Plans: DLA SBIR: To continue execution of all active Phase I and Phase DLA expects two new topics. Anticipate the selection of one to thre have the opportunity to compete for Phase II awards. DLA expects OSD/OSBP funding (\$6M) documented on DD form 1144.	ee topics per area. Upon completion, all active Phase I pro	ojects			
DLA STTR: To continue execution of all active Phase I STTR project opportunity to compete for Phase II awards. Expect to award a sin STTR funds.					
DMEA SBIR: DMEA will continue execution of all active SBIR proprogress to Phase II. DMEA will begin to study the feasibility of a heavelopment for a broadband quadrature mixer with integrated I/Q circuit reconstruction system.	nigh-brilliance 9KeV x-ray source. DMEA will complete pro				

PE 0605502S: *Small Business Innovative Research (SBIR...* Defense Logistics Agency

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistic	Date: May 2017		
Appropriation/Budget Activity	Project (Number/Name)		
0400 / 6	1 I Small Business Innovative Research		
	Research (SBIR)	(SBIR)	
	·		

Research (Sbirt)	odik)		
B. Accomplishments/Planned Programs (\$ in Millions) 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 2016	FY 2017	FY 2018
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 ne Phase I awards, and 6-8 new Phase II awards.	w		
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.	ent		
Accomplishments/Planned Programs Subtot	als 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.

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0708011S I Industrial Preparedness

Operational Systems 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
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.

PE 0708011S: *Industrial Preparedness* Defense Logistics Agency

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Date: May 2017

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 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.

PE 0708011S: *Industrial Preparedness* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Ju	Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agency									Date: May 2017		
Appropriation/Budget Activity 0400 / 7					, , , , , , , , , , , , , , , , , , , ,				ng Industria	ame) trial Base Manufacturing v Material Availability)		
COST (\$ in Millions) Prior Years FY 2016 FY 2017 Base				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

PE 0708011S: *Industrial Preparedness* Defense Logistics Agency

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen	су		Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S I Industrial Preparedness	7 I Împrovi	umber/Name) ng Industrial Base Manufacturing (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	-

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen		Date: May 2017	
· · · · · · · · · · · · · · · · · · ·	PE 0708011S I Industrial Preparedness	7 I Improvi	umber/Name) ing Industrial Base Manufacturing (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.

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Exhibit R-2A, RDT&E Project Justification: FY 2018 [Date: May 2017	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S I Industrial Preparedness	Project (Number/Name) 7 I Improving Industrial Base Manufacturing Processes (formerly Material Availability)
The Additive Manufacturing metric is the number of part	s qualified for AM and the lead-time savings achieved to make sm	all quantities of items.
At least 30% of the completed projects will transition.		
OSD-C financial metrics (obligation and disbursement) v	will be achieved.	

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Exhibit R-2A, RDT&E Project Ju	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 I Industrial Preparedness 8 I Maintaining Viable Supply Source (formerly High Quality Sources)				rces			
COST (\$ in Millions) Prior Years FY 2016 FY 2017 Base				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			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Age	ency	Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S I Industrial Preparedness	Project (Number/Name) 8 I 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.

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Exhibit R-2A, RDT&E Project Ju	stification:	FY 2018 C	efense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 7				PE 0708011S I Industrial Preparedness 9 I I				Project (Number/Name) 9 I Improving Technical and Logistics Information (formerly Industry and Custome 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:			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense L	Logistics Agency	9 I Improving Technical and Logis Information (formerly Industry an Collaboration) FY 2016 FY 2017 e developing			
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S I Industrial Preparedness	9 I Imp	proving Tech ation (forme	nical and Log	
B. Accomplishments/Planned Programs (\$ in Millions)			FY 2016	FY 2017	FY 2018
The MUST program completed plans to set up distributed pilots of	• • • • • • • • • • • • • • • • • • • •	-			
and demonstrating a digital specification authoring tool, a 3D visu	•				
requirements from the Services to DLA. This technology allows I	DLA, its customers and suppliers to access, manage and s	hare			
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.

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7: Operational Systems Development

R-1 Program Element (Number/Name)

PE 0708012S I 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).

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Date: May 2017

Exhibit R-2A, RDT&E Project J	ustification:	FY 2018 D	efense Log	istics Agen	су	,			,	Date: May	2017	
Appropriation/Budget Activity 0400 / 7					, , , , ,				Number/Name) ics 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.

PE 0708012S: *Pacific Disaster Centers* Defense Logistics Agency

Exhibit R-2A, RDT&E Project J	ustification:	FY 2018 D	efense Log	istics Agen	су					Date: May	2017	
Appropriation/Budget Activity 0400 / 7					` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` ` `					Number/Name) c 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 States 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			

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defens	se Logistics Agency		Date: N	1ay 2017	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S / Pacific Disaster Centers	_	(Number/I ic Disaster	•	
B. Accomplishments/Planned Programs (\$ in Millions)		I	FY 2016	FY 2017	FY 2018
priorities with the UH and PDC. The PDC Program Office also especially in the area of gaining Federal agency support and re		n			
FY 2016 Accomplishments:					
The Pacific Disaster Center (PDC) continues to be at the foref through the application of information, science and technology services supporting civil-military humanitarian assistance oper Nation agencies, ASEAN, national governments, and International Services include projects supporting development, and activities fall into three categories: Global Information Services Assessment; and Decision Support Platforms and Applications	PDC's products and services enhance foundational and glorations by the US Military and US agencies, state agencies, U onal/Non-Governmental Organizations (I/NGO). Foundationallysis, and delivery of relevant and actionable information. These, Anticipatory Sciences and Socio-Economic Risk and Vulne	obal nited al and ese			
Emphasis areas in FY 2016 include:					
 Improve the simplified DisasterAWARE/RAPIDS user interfar awareness, while allowing the system to accommodate "no/low platforms, as well as, degraded communications) Extend and enhance mobile computing and situational aware a) cross-device and cross-platform functionality, optimized for b) limited "down range" data collection & sharing capabilities (c) investigate and implement degraded but functional/operation d) investigate and implement user customization and data implement user customization and data implement in the subject matter Extend and enhance Bio Surveillance capabilities in collabor (DTRA)Bio Surveillance Portal (BSP) Joint Program Executive Extend collaboration with DTRA & other data providers in energy capabilities and experiences which in turn can be operationalized. Continue to grow competitive grants and proposals as a mean capabilities in support of DoD missions 	w bandwidth" operational mode (enabling better support to move beness platform for DisasterAWARE/RAPIDS to include: touch interface appropriate for mobile devices; e.g., damage photos, voice memos, etc.) nal "off-grid" capabilities for capabilities for capabilities for capabilities, in collaboration with partners such as ONR-fur ration with Navy and Defense Threat Reduction Agency's e Office shancing data fusion capabilities by-funded research and application programs to enhance the Core and applied in direct support of DoD HA/DR and DSCA miss	obile nded Center's sssions			
FY 2017 Plans:Risk and Vulnerability AssessmentExplore trends and shifts in risks and vulnerability using the	e last 7 years of data.				

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defens	e Logistics Agency	Date:	May 2017	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708012S I Pacific Disaster Centers	Project (Number 2 / Pacific Disaste		
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2016	FY 2017	FY 2018
Explore creating country-report where subnational data are	e available (based on COCOM NDPBA country projects)			
Data • In accordance with the latest (DRAFT) DoD study for uncladevelopment of standard protocols for interoperability.	assified information systems for disaster preparedness, enha	nce		
Continue development of new data sources for hazards and	d related observational data TBD			
Modeling Explore incorporating impacts from hazard models into the	e definition of disasters within the system.			
Continue enhancing application of hazard models to estimate	ating initial needs for HA/DR support missions			
Applications • Enhance RAPIDS functionality based on user feedback an	nd requirements			
Continue improving stabilization of the platform by increasing	ng cloud-based utilization			
Continue evaluating new and innovative technologies for er	nhancing user experience (for RAPIDS)			
FY 2018 Plans: Risk and Vulnerability Assessment Explore trend analysis based on existing Global RVA data at Improve analytical reporting/visualization and automated as Incorporate country-report analytical capabilities into the above	ssessment capabilities using Global RVA data			
 Data Explore feasibility of hosting classified data in RAPIDS, sho Continue development of data sources for hazards and relationships 				
Modeling Integrate alerting capabilities and hazard impact modeling Continue enhancing application of hazard models to estimate 	ate initial needs for HA/DR support missions			
Application				

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Logistics Agen								
1	R-1 Program Element (Number/Name) PE 0708012S / Pacific Disaster Centers		(Number/N					
	ZTT acii	iic Disaster	Cerner					
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 ex 	Continue evaluating new and innovative technologies for enhancing user experience (for RAPIDS)							
	Accomplishments/Planned Programs Sub	totals	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.

PE 0708012S: Pacific Disaster Centers Defense Logistics Agency

Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Logistics Agency

Appropriation/Budget Activity

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0708047S I Defense Property Accountability System (DPAS)

Date: May 2017

Operational Systems 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
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).

PE 0708047S: Defense Property Accountability System (... Defense Logistics Agency

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

PE 0708047S: Defense Property Accountability System (... Defense Logistics Agency

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R-1 Line #246