Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

DATE: April 2013

COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
Total Program Element	21.123	22.478	27.044	24.691	-	24.691	25.021	25.421	25.848	26.320	Continuing	Continuing
1: Combat Rations (CORANET)	1.868	1.401	2.047	2.089	-	2.089	2.122	2.157	2.194	2.234	Continuing	Continuing
2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	4.091	3.108	4.488	4.488	-	4.488	4.526	4.603	4.682	4.768	Continuing	Continuing
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.522	2.313	2.728	2.784	-	2.784	2.830	2.877	2.926	2.979	Continuing	Continuing
4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.188	1.100	1.308	1.335	-	1.335	1.358	1.380	1.403	1.429	Continuing	Continuing
5: Material Acquisition Electronics (MAE)	10.507	12.834	14.465	11.987	-	11.987	12.184	12.371	12.575	12.804	Continuing	Continuing
6: Battery Network (BATTNET)	0.947	1.722	2.008	2.008	-	2.008	2.001	2.033	2.068	2.106	Continuing	Continuing

[#] FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

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. Matures and validates emerging manufacturing technologies to support low-risk implementation in industry and Department of Defense (DoD) facilities, e.g. depots and shipyards. Addresses production issues early by providing timely solutions. Reduces risk and positively impacts system affordability by providing solutions to manufacturing problems before they occur.

DLA ManTech includes Combat Rations Network for Technology Implementation (CORANET), Customer Driven Uniform Manufacturing (CDUM), Procurement Readiness Optimization—Advanced Casting Technology (PRO-ACT), Procurement Readiness Optimization—Forging Advance System Technology (PRO-FAST), and Material Acquisition Electronics (MAE) and Battery Network (BATTNET). As well as, Other Congressional Add (OCA) programs that are Congressionally Directed efforts.

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

DATE: April 2013

BA 7: Operational Systems Development

B. Program Change Summary (\$ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	22.498	27.044	24.781	-	24.781
Current President's Budget	22.478	27.044	24.691	-	24.691
Total Adjustments	-0.020	0.000	-0.090	-	-0.090
 Congressional General Reductions 	-	-			
 Congressional Directed Reductions 	-	-			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-	_			
FY2014 Departmental Fiscal Guidance	-0.020	0.000	-0.090	-	-0.090

Change Summary Explanation

FY2012 FFRDC(f) Reduction: -\$0.062 million

FY2012 SBIR/STTR Transfer (Reduction): -\$0.543 million

FY2013 Secretary of Defense Initiatives: \$0.282 million

Exhibit R-2A, RDT&E Project Ju	ustification	: PB 2014 [Defense Log	jistics Agen	су					DATE : Apr	il 2013	
APPROPRIATION/BUDGET ACT	ΓΙΥΙΤΥ				R-1 ITEM	NOMENCL	ATURE		PROJECT			
0400: Research, Development, To		ation, Defen	ise-Wide				rial Prepared		1: Combat	Rations (C	ORANET)	
BA 7: Operational Systems Devel	lopment				Manufactu	ring Techno	ology (IP Ma	nTech)				
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
1: Combat Rations (CORANET)	2.089	-	2.089	2.122	2.157	2.194	2.234	Continuing	Continuing			
Quantity of RDT&E Articles												

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Accomplishments/Planned Programs (\$ in Millions)

In FY 2010, DLA Troop Support Subsistence sold \$4.7 billion in subsistence goods and services to the Department of Defense and other customers. The Rations portion of this business was \$702M in FY 2010. The Combat Rations R&D funding request is .002% of sales. The Combat Rations Program is focused on improving the manufacturing technologies related to the production and distribution of the combat rations that are at the forefront of these operations, including Meals Ready to Eat (MREs) as well as Unitized Group Rations (UGR). The objectives are increased readiness, improved quality, optimum sizing for transportation and storage; and better ration variety. CORANET research efforts also help control the cost of the combat rations. The CORANET program engages all elements of the supply chain including the producers, military Services, Army Natick Soldier Research Development and Engineering Center, United States Department of Agriculture (USDA), US Army Veterinary Command, US Army Public Health Command, DLA Logistics R&D, DLA Troop Support Subsistence and academia to research and transition improved technologies for operational rations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014	
Title: Combat Rations Accomplishments/Plans	1.401	2.047	2.089	
FY 2012 Accomplishments: Completed Short Term Project (STP) 3011 on "Time Temperature Indicator Data Analysis for MRE components" with recommendations on food quality improvements.				
FY 2013 Plans: Transition STPs 3009, Temperature Sensitivity of Frozen Foods; 3012, Knurled Seat Bar Implementation; 3013, Test Methodology Directional Tear; and 3014, Non-destructive Test for Measuring Tray Compressibility.				
Develop new Short Term Projects for MRE Menu Bag Assembly Line Automation, Process Validation projects for tray pack food, institutional-sized and individual-sized packages using Microwave Assisted Thermal Sterilization (MATS); and energy conservation for manufacturing.				
FY 2014 Plans: Transition STP 3008, Improved Thermal Processing of Foods Sealed in Polymeric Trays; and 3015, Continuous Retort Processing.				

UNCLASSIFIED

^{***} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agen	су		DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	1: Combat	Rations (CORANET)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Develop new Short Term Projects for MRE Menu Bag Assembly Line Automation, Process Validation projects for tray pack food, institutional-sized and individual-sized packages using Microwave Assisted Thermal Sterilization (MATS); and focus on energy conservation for manufacturing.			
Accomplishments/Planned Programs Subtotals	1.401	2.047	2.089

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Performance metrics include improved quality, decreased cost and improved acceptance of military combat rations. The performance objective is to transition 50% of completed projects to the industrial base. Cost benefit analysis is performed on the CORANET portfolio annually.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

DATE: April 2013

1: Combat Rations (CORANET)

Support (\$ in Millions)			FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO		FY 2014 Total				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Clemson University:Clemson, South Carolina	0.030	0.000	Dec 2011	0.010	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Dairy Management Incorporated:Des Plaines, Illinois	0.030	0.000	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Master Packaging:Tampa, Florida	0.030	0.000	Dec 2011	0.010	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Michigan State University:East Lansing, Michigan	0.462	0.000	Dec 2011	0.100	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Rutgers State University of New Jersey Division of Grants & Contract Accounting:New Brunswick, New Jersey	3.317	0.425	Dec 2011	0.500	Dec 2012	0.500	Dec 2013	-		0.500	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	SOPAKO, Incorporated:Mullins, South Carolina	0.213	0.000	Dec 2011	0.050	Dec 2012	0.050	Dec 2013	-		0.050	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	University of Illinois:Urbana, Illinois	0.095	0.106	Dec 2011	0.137	Dec 2012	0.100	Dec 2013	-		0.100	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	University of Tennessee:Knoxville, Tennessee	1.084	0.082	Dec 2011	0.200	Dec 2012	0.200	Dec 2013	-		0.200	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Texas Engineering Experiment Station, Office of Sponsored Research, Texas A&M University:College Station, Texas	1.476	0.022	Dec 2011	0.400	Dec 2012	0.200	Dec 2013	-		0.200	Continuing	Continuing	Continuing

PE 0708011S: Industrial Preparedness Manufacturing Technology (... Defense Logistics Agency

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R-1 Line #247

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

1: Combat Rations (CORANET)

DATE: April 2013

Support (\$ in Million	s)			FY 2	2012	FY 2	2013		2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
j. Manufacturing Process Support Costs	C/CPFF	Cadillac Products Incorporated:Troy, Michigan	0.075	0.020	Dec 2011	0.010	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
k. Manufacturing Process Support Costs	C/CPFF	Ohio State University Research Foundation:Columbus Ohio	0.045	0.000	Dec 2011	0.000		0.000		-		0.000	Continuing	Continuing	Continuing
I. Manufacturing Process Support Costs	C/CPFF	Oregon Freeze Dry Incorporated:Albany, Oregon	0.045	0.000	Dec 2010	0.010	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
m. Manufacturing Process Support Costs	C/CPFF	Research and Development Associates:San Antonio, Texas	0.333	0.000	Dec 2011	0.010	Dec 2012	0.150	Dec 2013	-		0.150	Continuing	Continuing	Continuing
n. Manufacturing Process Support Costs	C/CPFF	Sterling Foods, Limited:San Antonio, Texas	0.045	0.000	Dec 2011	0.010	Dec 2012	0.010	Dec 2013	-		0.010	Continuing	Continuing	Continuing
o. Manufacturing Process Support Costs	C/CPFF	Virginia Polytechnic Institute and State University:Blacksburg, Virginia	0.317	0.000	Dec 2011	0.100	Dec 2012	0.100	Dec 2013	-		0.100	Continuing	Continuing	Continuing
p. Manufacturing Process Support Costs	C/CPFF	Washington State Universtiy:Pullman, Washington	0.151	0.000	Dec 2011	0.300	Dec 2012	0.104	Dec 2013	-		0.104	Continuing	Continuing	Continuing
q. Manufacturing Process Support Costs	C/CPFF	Logistics Management Institute:McLean, Virginia	0.179	0.000	Dec 2011	0.075	Dec 2012	0.000		-		0.000	Continuing	Continuing	Continuing
r. Manufacturing Process Support Costs	C/CPFF	Ameriqual, Inc.:Evansville, Indiana	0.030	0.000	Dec 2011	0.050	Dec 2012	0.050	Dec 2013	-		0.050	Continuing	Continuing	
s. Manufacturing Process Support Costs	C/CPFF	Wornick:McAllen, Texas	0.090	0.413	Dec 2011	0.050	Dec 2012	0.050	Dec 2013	-		0.050	Continuing	Continuing	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

1: Combat Rations (CORANET)

DATE: April 2013

Support (\$ in Million	upport (\$ in Millions)			FY 2	FY 2012		FY 2013		FY 2014 Base		FY 2014 OCO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
s. Manufacturing Process Support Costs	C/CPFF	Impact Associates:Knoxville, TN	0.025	0.028	Apr 2012	0.025	Dec 2012	0.025	Dec 2013	-		0.025	Continuing	Continuing	
a. Manufacturing Process Support Costs	C/CPFF	Booz Allen Hamilton:McLean, VA	-	0.305	Mar 2012	-		0.500	Dec 2013	-		0.500	Continuing	Continuing	
		Subtotal	8.072	1.401		2.047		2.089		0.000		2.089			
															Target

											Target
	All Prior				FY 20	014 F	′ 2014 FY 2	2014 Cos	t To	Total	Value of
	Years	FY 2012	FY 2	2013	Bas	se e	OCO To	tal Com	plete	Cost	Contract
Project Cost Totals	8.072	1.401	2.047		2.089	0.00	0 2	2.089			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY
0400: Research, Development, Test & Evaluation, Defense-Wide
BA 7: Operational Systems Development

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

1: Combat Rations (CORANET)

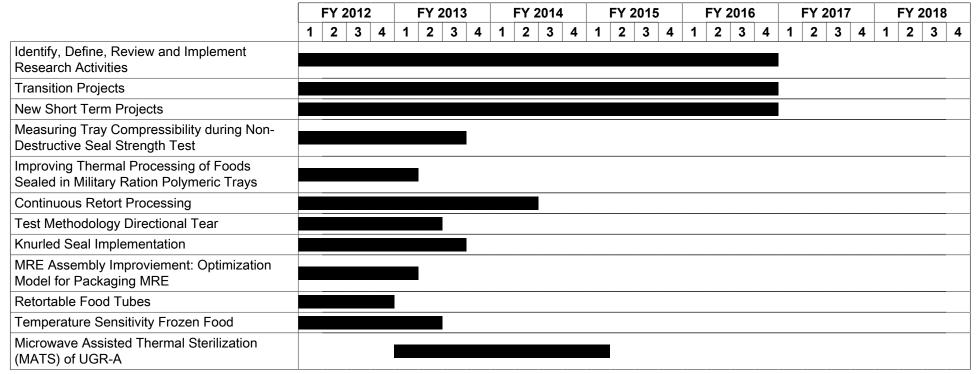


Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

1: Combat Rations (CORANET)

DATE: April 2013

Schedule Details

	Sta	art	En	ıd
Events	Quarter	Year	Quarter	Year
Identify, Define, Review and Implement Research Activities	1	2012	4	2016
Transition Projects	1	2012	4	2016
New Short Term Projects	1	2012	4	2016
Measuring Tray Compressibility during Non-Destructive Seal Strength Test	1	2012	3	2013
Improving Thermal Processing of Foods Sealed in Military Ration Polymeric Trays	1	2012	1	2013
Continuous Retort Processing	1	2012	2	2014
Test Methodology Directional Tear	1	2012	2	2013
Knurled Seal Implementation	1	2012	3	2013
MRE Assembly Improviement: Optimization Model for Packaging MRE	1	2012	1	2013
Retortable Food Tubes	1	2012	4	2012
Temperature Sensitivity Frozen Food	1	2012	2	2013
Microwave Assisted Thermal Sterilization (MATS) of UGR-A	1	2013	1	2015

Exhibit R-2A, RDT&E Project	Justification	PB 2014 D	Defense Log	istics Agen	су			DATE: April 2013				
APPROPRIATION/BUDGET AC 0400: Research, Development, BA 7: Operational Systems Dev		PE 070801		ATURE ial Prepared logy (IP Ma	PROJECT 2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)	4.091	3.108	4.488	4.488	-	4.488	4.526	4.603	4.682	4.768	Continuing	Continuing
Quantity of RDT&E Articles												

^{*} FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

The Department of Defense, through the Defense Logistics Agency, purchased \$2.1 billion of clothing and textile items in FY 2010. The lead-time is up to 15 months and the current inventory acquisition value is over \$1.4 billion. The current focus of DLA military clothing research is Customer Driven Uniform Manufacturing (CDUM). CDUM explores the application of advanced technologies and process reengineering to the end-to-end management of clothing and individual equipment (CIE). CDUM is focusing on three thrust areas:

- 1. Supply Chain Process Reengineering and Advanced Technology for Military Clothing
- 2. Central Issue Facility (CIF) Process Reengineering and Shared Visibility
- 3. Manufacturing Methods for Product Performance and Quality Improvement

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014	
Title: Customer Driven Uniform Manufacturing Accomplishments/Plans	3.108	4.488	4.488	
FY 2012 Accomplishments: RFID Item Level Technology Phase 2 and Transition; Product Life Cycle Management Technical Data Package.				
FY 2013 Plans: CDUM II will continue the TDP project to address gaps in product specifications by developing a flexible environment that integrates multiple input and output formats to improve management, configuration control and communication between the Government and Defense Industrial Base manufacturers. Technical initiatives include developing a semantic data driven product data environment. Data mining will be adapted to populate the data models. The primary benefit will be a significant reduction in TDP errors and improved data access by the multiple tiers of industrial base. In addition, the technology facilitates communication among the Service Design Agencies, the Industrial Base and DLA Troop Support-Clothing and Textiles.				
FY 2014 Plans:				

UNCLASSIFIED

^{##} The FY 2014 OCO Request will be submitted at a later date

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)	(CDU	stomer Driven Uniform Manufacturi M) (Previously called Apparel arch Network)					
B. Accomplishments/Planned Programs (\$ in Millions) CDUM II will continue the TDP project as well as the pilot sites at Lackland	DUM II	FY 2012	FY 2013	FY 2014				

Accomplishments/Planned Programs Subtotals

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

The CDUM program focus is on clothing and individual equipment (CIE). The cost benefit analysis for the RFID initiative has demonstrated improvements in inventory accuracy through reductions in adjustments.

Cost benefit analyses are performed on CDUM initiatives on an ongoing basis.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency

will transition prototype implementations. CDUM III initiatives will be developed.

DATE: April 2013

3.108

4.488

4.488

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

4.488

PROJECT

2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)

DATE: April 2013

Support (\$ in Million	s)			FY	2012	FY 2	2013		2014 ase	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Production Data Integration Technologies:Long Beach, California	8.400	0.000	Jan 2011	0.550	Jan 2013	-		-		-	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	AdvanTech:Annapolis Maryland	6.567	1.341	Jan 2011	1.845	Jan 2013	1.910	Jan 2014	-		1.910	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	Human Solutions NA, Incorporated:Dearborn Michigan	0.750	0.477	Jan 2012	0.550	Jan 2013	0.578	Jan 2014	-		0.578	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/BPA	Logistics Management Institute:McLean, Virginia	3.920	1.290	Jan 2011	1.543	Aug 2012	2.000	Aug 2013	-		2.000	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Atlantic Diving Supply:Virginia Beach, VA	0.129	-		-		-		-		-	Continuing	Continuing	Continuing
		Subtotal	19.766	3.108		4.488		4.488		0.000		4.488			
			All Prior Years	FY	2012	FY	2013	FY 2 Ba	2014 ase	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract

Remarks

Project Cost Totals

19.766

3.108

4.488

0.000

4.488

hibit R-4, RDT&E Schedule Profile: PB 2014 D PROPRIATION/BUDGET ACTIVITY								R-1	I ITE	EM N	OM	FNC	:I A	TUE	?F					PR).IF			E: A	•				
00: Research, Development, Test & Evaluation, L 7: Operational Systems Development	Defer	efense-Wide							PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)									2: Customer Driven U (CDUM) (Previously of Research Network)							ctur				
		Y 2				_	201								F		2016			FY 2017 F			FY 2018						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	: ;	3 4	4	1	2	3	4	1	2	3	4	1	2	3	4
Supply Chain Process Reengineering and AIT for Military Clothing																													
Shared Army and DSCP Asset Visibility and CIF Process Reengineering																													
Manufacturing Methods for Product Performance and Quality Improvement																													
RFID Item Level Technology Phase 2 and Transition																													
Product Life Cycle Management Technical Data Package																													
Transition to CDUM II Prototype Implementations																													
CDUM II New Initiatives																													

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

2: Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel

DATE: April 2013

Research Network)

Schedule Details

	Sta	art	Er	nd
Events	Quarter	Year	Quarter	Year
Supply Chain Process Reengineering and AIT for Military Clothing	1	2012	4	2014
Shared Army and DSCP Asset Visibility and CIF Process Reengineering	1	2012	4	2014
Manufacturing Methods for Product Performance and Quality Improvement	1	2012	4	2014
RFID Item Level Technology Phase 2 and Transition	4	2012	4	2014
Product Life Cycle Management Technical Data Package	2	2012	4	2014
Transition to CDUM II Prototype Implementations	4	2012	4	2015
CDUM II New Initiatives	4	2013	4	2015

Exhibit R-2A, RDT&E Project Ju		DATE: April 2013										
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Devel		R-1 ITEM N PE 070801 Manufactur	1S: Industr	ial Prepared	T ement Readiness Optimization- I System Technology (PRO-ACT)							
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)	2.522	2.313	2.728	2.784	-	2.784	2.830	2.877	2.926	2.979	Continuing	Continuing
Quantity of RDT&E Articles												

^{*} FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Weapon system spare parts which use castings are responsible for a disproportionate share of backorders. Cast parts are 2% of National Stock Numbered parts but represent 4% of all backorders, and when only the oldest backorders are considered, up to 10% of them are castings. This program develops innovative technologies and processes to improve the procurement, manufacture, and design of weapon system spare parts that use castings. The Procurement Readiness Optimization-Advanced Casting Technology (PRO-ACT) program takes a systems view and considers not only the Defense Logistics Agency (DLA) perspective but also the Military Service Engineering Support Activities (ESA) which DLA works with to solve technical issues, as well as the industrial supply base. The program has three components: Rapid Acquisition, Quality, and Cost Effectiveness.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Procurement Readiness Optimization-Advanced Casting Technology Accomplishments/Plans	2.313	2.728	2.784
FY 2012 Accomplishments: New casting task order contracts were awarded for new the projects, period of performance over 60 months. Kick off meeting and JDMTP metals subpanel review was held 24-25 July 2012.			
FY 2013 Plans: Continue development of the new projects under the three major R&D initiatives for castings: 1) improved castings inspection methods such as Digital Radiography for magnesium & copper based castings; 2) improved casting materials & processes such as rapid tooling & prototyping using on demand melting and lightweight high strength cast alloys process; additive manufacturing of airfoil investment casting cores by ceramic stereolithography; and 3) process modeling for lube-free die casting, steel casting performance and refinement of cast part performance in the presence of discontinuities. Conduct technical review in conjunction with the annual JDMTP Metals Subpanel review of all ManTech projects.			
FY 2014 Plans:			

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A , RDT&E Project Justification : PB 2014 Defense Logistics Ager	ncy	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	3: Procurement Readiness Optimization-
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)	Advanced System Technology (PRO-ACT)

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Continue work on projects reviewing progress. Conduct technical review in conjunction with the annual JDMTP Metals Subpanel review of all ManTech projects.			
Accomplishments/Planned Programs Subtotals	2.313	2.728	2.784

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

N/A

Remarks

D. Acquisition Strategy

Awarded two base task order contracts competitively through a Broad Agency Announcement (BAA). Task order contracts for projects have also been awarded.

E. Performance Metrics

This program has a business case that justifies the investment in terms of economic and readiness benefits.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)

FY 2014

PROJECT

FY 2014

3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)

FY 2014

DATE: April 2013

Support (\$ in Million	,			FY 2	FY 2012		FY 2013		2014 Ise	FY 2014 OCO		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	10.713	2.013	Mar 2012	2.428	Feb 2013	2.384	Mar 2014	-		2.384	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Honeywell International Inc.:Phoenix, Arizona	0.007	0.300	Mar 2012	0.300	Feb 2013	0.400	Mar 2014	-		0.400	Continuing	Continuing	Continuing
		Subtotal	10.720	2.313		2.728		2.784		0.000		2.784			
			All Prior Years	FY	2012	FY:	2013		2014 ase		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract
		Project Cost Totals	10.720	2.313		2.728		2.784		0.000		2.784			

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Defense Logistics Agency DATE: April 2013 **R-1 ITEM NOMENCLATURE PROJECT** APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide PE 0708011S: Industrial Preparedness 3: Procurement Readiness Optimization-BA 7: Operational Systems Development Manufacturing Technology (IP ManTech) Advanced System Technology (PRO-ACT) FY 2012 **FY 2016 FY 2013** FY 2014 FY 2015 FY 2017 **FY 2018** 2 3 3 3 4 2 3 4 2 4 1 1 Digital Radiography Standard for Thin Section Steel Castings Tools for Streamlining Casting Supply Chains. Additive Manufacturing of Airfoil Investment Casting Cores by Ceramic Sterolithography Defense Casting for Supply Chain Integration and Statistical Properties for MMPDS Standard. Modeling of Steel Casting Performance -Dimensions and Distortion. Lightweight High Strength Cast Alloys Process Development. Lube-free Die Casting.

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

3: Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)

DATE: April 2013

Schedule Details

	St	art	End		
Events	Quarter	Year	Quarter	Year	
Digital Radiography Standard for Thin Section Steel Castings	3	2012	2	2013	
Tools for Streamlining Casting Supply Chains.	2	2012	2	2017	
Additive Manufacturing of Airfoil Investment Casting Cores by Ceramic Sterolithography	2	2012	2	2017	
Defense Casting for Supply Chain Integration and Statistical Properties for MMPDS Standard.	2	2012	2	2017	
Modeling of Steel Casting Performance - Dimensions and Distortion.	2	2012	2	2017	
Lightweight High Strength Cast Alloys Process Development.	3	2012	3	2017	
Lube-free Die Casting.	3	2012	3	2017	

Exhibit R-2A, RDT&E Project Ju	stification:	PB 2014 D	Defense Log	istics Agen	су				DATE: April 2013				
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Devel		PE 070801	NOMENCLA 11S: Industr ring Techno	ial Prepared			ment Readi Ivanced Sy	•	ess Optimization- em Technology				
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)	1.188	1.100	1.308	1.335	-	1.335	1.358	1.380	1.403	1.429	Continuing	Continuing	
Quantity of RDT&E Articles													

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

Weapon system spare parts that use forgings are responsible for a disproportionate share of DLA backorders. Forged parts are ~2% of National Stock Numbered parts but represent ~4% of all backorders, and when only the oldest backorders are considered, up to 10% of them are forgings. This program develops methods and technology to improve the supply of forged parts. This program takes a holistic view of the problem and attacks root causes inside DLA, at DLA's engineering support activity partners in the Services, and at DLA forging suppliers. The program has three thrusts: Business Enterprise Integration to improve supply support approaches; FORGE-IT to develop and improve technical problems; and R&D which develops new technology for forging suppliers, including new methods for making forge dies (typically the longest lead time item) and for simulation of metal flow inside the forge die (to eliminate trial and error development of the die).

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Procurement Readiness Optimization-Forging Advanced System Technology Accomplishments/Plans	1.100	1.308	1.335
FY 2012 Accomplishments: Finalize a web based tool that links forging customers to forging suppliers; begin implementation of lean six sigma process improvements at forges; develop multi-material, multi-method evaluation tool. Address vexing forging supply chains to improve forging design and acquisition processes. Initiate procurement action for next program.			
FY 2013 Plans: Finalize projects under current initiative, such as software for lean six sigma process improvements at forges; deploy multimaterial, multi-method evaluation tool. Also, finalize and award new contract for next tasks and projects. Conduct technical review in conjunction with the annual JDMTP Metals Subpanel review of all ManTech projects.			
FY 2014 Plans: Continue work on projects reviewing progress. Conduct technical review in conjunction with the annual JDMTP Metals Subpanel review of all ManTech projects.			
Accomplishments/Planned Programs Subtotals	1.100	1.308	1.335

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistic	s Agency	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development	R-1 ITEM NOMENCLATURE PE 0708011S: Industrial Preparedness Manufacturing Technology (IP ManTech)	PROJECT 4: Procurement Readiness Optimization Forging Advanced System Technology (PRO-FAST)
. Other Program Funding Summary (\$ in Millions)		
N/A .		
<u>emarks</u>		
A Broad Agency Announcement (BAA) is planned.		
E. Performance Metrics		
This program has a business case which justifies the investment in terr	ms of economic and readiness benefits.	

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

Project Cost Totals

5.729

1.100

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

1.335

PROJECT

4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)

1.335

DATE: April 2013

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba	2014 ase	FY 2	2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Advanced Technologies International:North Charleston, South Carolina	5.729	1.100	Jan 2012	1.308	Feb 2013	1.335	Mar 2014	-		1.335	Continuing	Continuing	Continuing
		Subtotal	5.729	1.100		1.308		1.335		0.000		1.335			
			All Prior Years	FY	2012	FY 2	2013	FY 2 Ba	2014 ase	FY 2	2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract

1.308

Remarks

0.000

hibit R-4, RDT&E Schedule Profile: PB 2014 [Defense	Logist	tics Ag	gency														DΑ	TE: A	pril	2013	3		
PROPRIATION/BUDGET ACTIVITY 00: Research, Development, Test & Evaluation, 7: Operational Systems Development	Defens	e-Wide	•		PE (708	M NOM 8011S: <i>I</i> cturing T	Indus	stria	l Pre	pare				4: F For	ging	uren	var	nt Rea nced S					
	FY	/ 2012		FY 20	013		FY 201	4		FY	201	5		FY 2	2016	6		FY	2017		l	FY 20)18	_
	1 2	2 3	4 1	2	3 4	1	2 3	4	1	2	3	4	1	2	3	4	1	2	2 3	4	1	2	3	4
DoD Procurement Tools and Technical Support	t E																							
Simulation of Heat Treat Distortion																								
Simulation and Workforce Development																								
Rapid Low Cost Data Generation for Simulation																								
Next Generation Low Cost Aluminum Alloys																								
National Forging Tooling Database (NFTD)																							_	
Metal and Process Optimization (MPO)																								
SmartChart™ Intelligent Process Tools for Forges																								

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

PROJECT

4: Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)

DATE: April 2013

Schedule Details

	Sta	art	E	nd
Events	Quarter	Year	Quarter	Year
DoD Procurement Tools and Technical Support	1	2012	2	2013
Simulation of Heat Treat Distortion	3	2013	4	2017
Simulation and Workforce Development	1	2012	4	2013
Rapid Low Cost Data Generation for Simulation	3	2013	4	2017
Next Generation Low Cost Aluminum Alloys	3	2013	4	2017
National Forging Tooling Database (NFTD)	1	2012	2	2013
Metal and Process Optimization (MPO)	1	2012	4	2013
SmartChart™ Intelligent Process Tools for Forges	1	2012	2	2013

Exhibit R-2A, RDT&E Project Ju	stification:	: PB 2014 E	Defense Log	istics Agen	су					DATE: Apr	il 2013	
APPROPRIATION/BUDGET ACT 0400: Research, Development, Te BA 7: Operational Systems Devel	est & Evalua	ation, Defen	se-Wide		PE 070801	NOMENCLA 11S: Industr ring Techno	ial Prepared		PROJECT 5: Material		Electronics	s (MAE)
COST (\$ in Millions)	All Prior Years	FY 2012	FY 2013 [#]	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
5: Material Acquisition Electronics (MAE)	10.507	12.834	14.465	11.987	-	11.987	12.184	12.371	12.575	12.804	Continuing	Continuing
Quantity of RDT&E Articles												

^{*}FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

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

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
Title: Material Acquisition Electronics Accomplishments/Plans	12.834	14.465	11.987
FY 2012 Accomplishments: MAE has transitioned fully-developed and verified 800 nanometer Emulation production capabilities, ranging to 200,000 gates, to DLA Land and Maritime for full-scale production of previously non-procurable ICs. It also transitioned a fully-developed and verified high speed emitter-coupled logic production capability to source critical high demand NSNs lacking supply. MAE has formulated device family targets for a Linear Emulation thrust. It initiated a 250 nanometer Emulation fabrication process (High Performance (speed) and Density) development providing additional FSC 5962 coverage. It continued 350 nanometer Emulation fabrication process development, bringing new capabilities to the Customers and Agency. It incorporated Integrated Circuit Characterization tool advancements into the Emulation flow, enabling supply for non-procurables. The tool also provided a value-added capability for our Customers' technical data packages. MAE implemented microcircuit DNA marking to assure traceability / trust in the supply chain.			
FY 2013 Plans: MAE will initiate specific process, design, and test verification developments in its new Linear Emulation thrust, augmenting our span of FSC 5962. MAE will transition additional Advanced CMOS Digital Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. MAE will also transition higher density Read-Only and Random-Access Memory Emulation capability into full-scale production further increasing DLA's ability			

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Age	ncy	DATE: April 2013
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	5: Material Acquisition Electronics (MAE)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
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 continue 350 and 250 nanometer Emulation fabrication process development, bringing new capabilities to the Customers and Agency.			
FY 2014 Plans: MAE will continue specific process, design, and test verification developments in its Linear Emulation thrust. It will continue planning for the specific Emulation technology implementations to support specific device family groups in consonance with Customer and Agency requirements. It will prototype 350 nanometer Emulation circuitry, bringing Emulation capability that reestablishes sources for additional NSNs. It will continue 250 nanometer Emulation fabrication process development providing additional FSC 5962 coverage in its Digital Emulation thrust.			
Accomplishments/Planned Programs Subtotals	12.834	14.465	11.987

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

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Transition of one technology implementation (base array) to low-rate initial production or full-scale production.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

Project Cost Totals

50.366

12.834

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

11.987

PROJECT

11.987

5: Material Acquisition Electronics (MAE)

DATE: April 2013

Support (\$ in Millions	s)			FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise		2014 CO	FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	SRI International:Princetor New Jersey	, 50.366	12.834	Oct 2012	14.465	Oct 2012	11.987	Oct 2013	-		11.987	Continuing	Continuing	Continuing
		Subtotal	50.366	12.834		14.465		11.987		0.000		11.987			
			All Prior Years	FY 2	2012	FY 2	2013	FY 2 Ba	2014 ise		2014 CO	FY 2014 Total	Cost To	Total Cost	Target Value of Contract

14.465

Remarks

0.000

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

FY 2012

FY 2013

FY 2014

FY 2015

FY 2016

FY 2017

FY 2018

		FY	201	2		FY	2013	;		FY 2	2014		F	FY 2	2015			FY 2	2016	;		FY 2	2017	7		FY 2	2018	3
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Perform Gap Analysis (GA)																												
Implement Process Improvements																												
Plan required Process Improvements																												
Perform Process Review																												
Transition New Microcircuit Designs to LRIP																												
Develop Low Rate Initial Production (LRIP) Capability																												
Develop Prototypes for Test and Insertion																												
Update Design Library																												
Perform Base Array Designs Required to Fill GA																												
Monitor and Adjust Process Improvements																												

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

PROJECT

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

APPROPRIATION/BUDGET ACTIVITY

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

5: Material Acquisition Electronics (MAE)

DATE: April 2013

Schedule Details

	Sta	art	Er	ıd
Events	Quarter	Year	Quarter	Year
Perform Gap Analysis (GA)	1	2012	4	2018
Implement Process Improvements	1	2012	4	2018
Plan required Process Improvements	1	2012	4	2018
Perform Process Review	1	2012	4	2018
Transition New Microcircuit Designs to LRIP	1	2012	4	2018
Develop Low Rate Initial Production (LRIP) Capability	1	2012	4	2018
Develop Prototypes for Test and Insertion	1	2012	4	2018
Update Design Library	1	2012	4	2018
Perform Base Array Designs Required to Fill GA	1	2012	4	2018
Monitor and Adjust Process Improvements	1	2012	4	2018

0400: Research, Development, Test & Evaluation, Defense-Wide BA 7: Operational Systems Development COST (\$ in Millions) All Prior FY 2014 FY 2014 FY 2014 FY 2014 FY 2014									DATE: April 2013				
0400: Research, Development, T	PE 07080	11S: Industi	rial Prepared	PROJECT 6: Battery	Network (BATTNET)								
COST (\$ in Millions)		FY 2012	FY 2013 [#]		_		FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost	
6: Battery Network (BATTNET)	0.947	1.722	2.008	2.008	-	2.008	2.001	2.033	2.068	2.106	Continuing	Continuing	
Quantity of RDT&E Articles													

^{*} FY 2013 Program is from the FY 2013 President's Budget, submitted February 2012

A. Mission Description and Budget Item Justification

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

BATTNET is focused on improving the supply and reducing the cost of procured batteries used in fielded weapon systems, such as communication radios and armored vehicles. Batteries exhibit dynamic challenges for military logistics. BATTNET is a community of practice of battery supply chain members, engineering support activities, researchers, and users. BATTNET conducts R&D to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY11, DLA received 143K orders for 3.6M batteries at \$238M Net Value compared to FY10 (\$237M) and FY09 (\$254M).

· · · · · · · · · · · · · · · · · · ·			
Title: BATTNET Accomplishments/Plans	1.722	2.008	2.008
FY 2012 Accomplishments: BATTNET successfully developed initial capabilities in (1)a low cost, electrostatic process for electrode production that eliminates the use of hazardous chemicals and associated capital equipment, (2)standard module designs for several emerging lithiumion batteries for aircraft, ground vehicle, underwater vehicle, and soldier weapon systems, and (3)progress on new production capability for higher performance soldier batteries using hybrid Li-CFx. Coordinated and partially funding initial selections from a new Advanced Battery Manufacturing topic with DLA's Small Business Innovation Research (SBIR) program. BATTNET contracts are also being used for two battery manufacturing development projects selected by the Industrial Base Innovation Fund.			
FY 2013 Plans: BATTNET has identified several Short Term Projects: Expanding low cost electrode production capabilities, additional production capabilities in higher performance soldier batteries, and innovative manufacturing methods for low cost battery materials. A new BAA will be issued to refresh the partnerships in BATTNET R&D.			
FY 2014 Plans: R&D will continue to be performed through identification and awards of new Short Term Projects (STP) with an expected duration of 18-24 months and an average funding of \$200K-\$500K per year. STP proposals are required to include a business case			

FY 2012

FY 2013

FY 2014

^{##} The FY 2014 OCO Request will be submitted at a later date

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agen		DATE: April 2013	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0708011S: Industrial Preparedness	6: Battery	Network (BATTNET)
BA 7: Operational Systems Development	Manufacturing Technology (IP ManTech)		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2012	FY 2013	FY 2014
with specific metrics and transition plan for success. BATTNET will also pursue additional battery manufacturing advances from successful DLA SBIR projects.			
Accomplishments/Planned Programs Subtotals	1.722	2.008	2.008

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

N/A

Remarks

D. Acquisition Strategy

The BATTNET R&D partners were established by contract September 2009 through a competitive Broad Area Announcement (BAA) allowing for maximum competition. Partner Contracts were based upon proposals that demonstrated knowledge, experience, and expertise in the following areas of interest: Automation, Battery Maintenance, Competition & Contracting Requirements, Diminishing Manufacturing & Supply, Lithium Battery Safety, Reducing Acquisition Costs, Shelf Life, Supply Chain Logistics, Surge/Sustainment, and Technology Transition/Insertion. The BATTNET, which includes a Government Steering Group (GSG) of power source technical experts from the military services R&D groups, is informed of general R&D requirements for supply chain improvement. The partners develop among themselves related R&D projects, which are then formally evaluated by the GSG. Selected projects are then chartered within DLA and planned for contract STP awards when funds are available.

E. Performance Metrics

Each Short Term Project (STP) will have performance metrics appropriate to its scope. Also all STPs will include a business case to demonstrate return on investment, or a readiness case to calculate warfighter impact versus costs.

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

BA 7: Operational Systems Development

R-1 ITEM NOMENCLATURE

PE 0708011S: Industrial Preparedness

Manufacturing Technology (IP ManTech)

DATE: April 2013

6: Battery Network (BATTNET)

Support (\$ in Millions)				FY 2	2012	FY 2	2013		2014 ise	FY 2		FY 2014 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	All Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To	Total Cost	Target Value of Contract
a. Manufacturing Process Support Costs	C/CPFF	Quallion LLC:Sylmar, CA	0.331	0.364	Dec 2011	0.225	Dec 2012	0.225	Dec 2013	-		0.225	Continuing	Continuing	Continuing
b. Manufacturing Process Support Costs	C/CPFF	Yardney Technical Products:Pawcatuck, CT	0.050	0.025	Dec 2011	0.025	Dec 2012	0.025	Dec 2013	-		0.025	Continuing	Continuing	Continuing
c. Manufacturing Process Support Costs	C/CPFF	EaglePicher Technologies:Joplin, MO	0.050	0.302	Dec 2011	0.125	Dec 2012	0.100	Dec 2013	-		0.100	Continuing	Continuing	Continuing
d. Manufacturing Process Support Costs	C/CPFF	Eskra Technical Products:Saukville, WI	0.465	0.300	Dec 2011	0.300	Dec 2012	1.000	Dec 2013	-		1.000	Continuing	Continuing	Continuing
e. Manufacturing Process Support Costs	C/CPFF	Lockheed Martin Corporation:Grand Prairie, TX	0.050	0.025	Dec 2011	0.300	Dec 2012	0.025	Dec 2013	-		0.025	Continuing	Continuing	Continuing
f. Manufacturing Process Support Costs	C/CPFF	Redblack Communications:Holly MD	wood).300	0.195	Dec 2011	0.125	Dec 2012	0.025	Dec 2013	-		0.025	Continuing	Continuing	Continuing
g. Manufacturing Process Support Costs	C/CPFF	Saft America:Cockeysville, MD	0.050	0.025	Dec 2011	0.500	Dec 2012	0.100	Dec 2013	-		0.100	Continuing	Continuing	Continuing
h. Manufacturing Process Support Costs	C/CPFF	Spectrum Brands:Madison, WI	0.025	0.025	Dec 2011	0.025	Dec 2012	0.025	Dec 2013	-		0.025	Continuing	Continuing	Continuing
i. Manufacturing Process Support Costs	C/CPFF	Innovative Battery Consulting:Southport, NC	0.075	0.125	Dec 2011	0.075	Dec 2012	0.175	Dec 2013	-		0.175	Continuing	Continuing	Continuing
j. Manufacturing Process Support Costs	C/CPFF	Alion Science & Technology:Rome, NY	0.513	0.228	Dec 2011	0.308	Dec 2012	0.308	Dec 2013	-		0.308	Continuing	Continuing	Continuing
k. Manufacturing Process Support Costs	C/FP	Logistics Management Institute (LMI):McLean, VA	0.050	0.108	Dec 2011	0.000		-		-		-	Continuing	Continuing	
		Subtotal	1.959	1.722		2.008		2.008		0.000		2.008			

APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, BA 7: Operational Systems Development	Defense-	Wide		IENCLATURE Industrial Prepared Technology (IP Mai	Iness	PROJE 6: Batte	CT ry Networ	rk (BATTN	JET)	
	All Prior Years	FY 2012	FY 2013	FY 2014 Base	FY 2		FY 2014 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	1.959	1.722	2.008	2.008	0.000		2.008			
Remarks										

Exhibit R-3, RDT&E Project Cost Analysis: PB 2014 Defense Logistics Agency

DATE: April 2013

Exhibit R-4, RDT&E Schedule Profile: PB 2014 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

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

DATE: April 2013

R-1 ITEM NOMENCLATURE
PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

6: Battery Network (BATTNET)

		FY 2012			FY	2013	3		FY 2014 FY 2015						FY	2016	;	FY 2017				FY 2018						
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Battery Network Program																												
Coating Cost Reduction for Rechargeable Lithium-Ion Batteries (Eskra Technical Products)																												
Lithium-Ion Battery Modularity for Military Applications (Quallion)																												
Manufacturing Technology for Hybrid Li-CFx Primary C&E battery (RedBlack/Ultralife)																												
Zero-volt Battery Technology for Military Applications (Quallion)																												
Production Developments for Li-CFx Batteries (EaglePicher)																												

Exhibit R-4A, RDT&E Schedule Details: PB 2014 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

PROJECT

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

PE 0708011S: Industrial Preparedness
Manufacturing Technology (IP ManTech)

6: Battery Network (BATTNET)

DATE: April 2013

BA 7: Operational Systems Development

APPROPRIATION/BUDGET ACTIVITY

Schedule Details

	St	art	End			
Events	Quarter	Year	Quarter	Year		
Battery Network Program	1	2012	4	2017		
Coating Cost Reduction for Rechargeable Lithium-Ion Batteries (Eskra Technical Products)	1	2012	1	2012		
Lithium-Ion Battery Modularity for Military Applications (Quallion)	3	2012	3	2012		
Manufacturing Technology for Hybrid Li-CFx Primary C&E battery (RedBlack/Ultralife)	4	2012	3	2013		
Zero-volt Battery Technology for Military Applications (Quallion)	2	2012	4	2013		
Production Developments for Li-CFx Batteries (EaglePicher)	2	2012	4	2013		