Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Logistics Agency											Date: February 2015	
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*					R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*							
COST ($ in Millions)	**Prior Years**	**FY 2014**	**FY 2015**	**FY 2016 Base**	**FY 2016 OCO**	**FY 2016 Total**	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**Cost To Complete**	**Total Cost**
Total Program Element	67.792	21.678	22.366	24.605	-	24.605	24.865	25.295	25.987	26.507	Continuing	Continuing
1: *Combat Rations (CORANET)*	5.004	1.154	1.593	-	-	-	-	-	-	-	Continuing	Continuing
2: *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*	11.231	3.944	3.421	-	-	-	-	-	-	-	Continuing	Continuing
3: *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*	7.282	3.045	2.139	-	-	-	-	-	-	-	Continuing	Continuing
4: *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*	3.460	1.163	1.026	-	-	-	-	-	-	-	Continuing	Continuing
5: *Material Acquisition Electronics (MAE)*	36.343	10.501	12.185	-	-	-	-	-	-	-	Continuing	Continuing
6: *Battery Network (BATTNET)*	4.472	1.871	2.002	-	-	-	-	-	-	-	Continuing	Continuing
7: *Material Availability (MA)*	-	-	-	6.875	-	6.875	6.956	7.073	7.293	7.439	Continuing	Continuing
8: *High Quality Sources (HQS)*	-	-	-	12.373	-	12.373	12.482	12.707	13.011	13.271	Continuing	Continuing
9: *Industry and Customer Collaboration(ICC)*	-	-	-	5.357	-	5.357	5.427	5.515	5.683	5.797	Continuing	Continuing

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),

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Logistics Agency	Date: February 2015
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0708011S *I Industrial Preparedness Manufacturing Technology (IP ManTech)*

Material Acquisition Electronics (MAE) and Battery Network (BATTNET). As well as, Other Congressional Add (OCA) programs that are Congressionally Directed efforts.

B. Program Change Summary ($ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	22.291	22.366	22.729	-	22.729
Current President's Budget	21.678	22.366	24.605	-	24.605
Total Adjustments	-0.613	-	1.876	-	1.876
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.613	-			
• Program Adjustment	-	-	1.876	-	1.876

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 1 / *Combat Rations (CORANET)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
1: *Combat Rations (CORANET)*	5.004	1.154	1.593	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding and technical work for the Combat Rations program has been reallocated to the Material Availability Strategic Focus Area. Modern battlefield requirements demand subsistence support that adequately provides for the needs of our military personnel in extremely intense and highly mobile combat situations that can be easily adapted to the civilian sector for humanitarian feeding. In FY 2014, DLA Troop Support Subsistence sold $4 billion in subsistence goods and services to the Department of Defense and other customers. The Rations portion of this business was $702M in FY 2014. The Combat, Humanitarian and Disaster Relief 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 Combat, Humanitarian and Disaster Relief Rations.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Combat Rations Accomplishments/Plans	1.154	1.593	-
FY 2014 Accomplishments: Completed Short Term Projects (STP) 3006 (MRE Assembly Improvement: Optimization Model for Packaging), STP 3008 (Improved Thermal Processing of Foods Sealed in Polymeric Trays, STP 3015 (Continuous Retort Processing, STP 3012 (Implementation Knurled Heat Seal Bar and Destructive Test Protocol, STP 3013 (Test Methodology Directional Tear), and STP 3014 (Measuring Tray Compressibility during Non-Destructive Seal Strength Test).			
FY 2015 Plans: Complete and begin implementation for STP 3016 using proven MATS processing and determine if other rations can benefit from the same pilot process as a second wave of MATS initiatives. Kick-off the new STPs for Optimizing Combat Ration Inspections (STP 4017) and MRE Supply Chain Process and Cost Evaluation (STP 4018) and MRE Shelf Life Monitoring Analysis (STP 5019). Refine the Inventory Optimization review white paper and convert to the Charter Format for approval. Revisit or redefine CORANET Workshop requirements in order to reconvene with DLA Troop Support active participation.			
FY 2016 Plans: Efforts related to Combat Rations have been moved to the Material Availability Strategic Focus Area.			
Accomplishments/Planned Programs Subtotals	1.154	1.593	-

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 1 / *Combat Rations (CORANET)*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

The Combat Rations 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.

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 1 / *Combat Rations (CORANET)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Clemson University	C/CPFF	Clemson University : SC	0.160	0.020		0.020		-		-		-	-	-	-
Michigan State University	C/CPFF	Michigan State University : MI	0.020	0.020		0.020		-		-		-	-	-	-
Rutgers State University of New Jersey Division of Grants & Contract Accounting	C/CPFF	Rutgers State University of New Jersey Division of Grants & Contract Accounting : NJ	2.000	0.800		0.400		-		-		-	-	-	-
SOPAKO, Incorporated	C/CPFF	SOPAKO, Incorporated : SC	0.020	0.020		0.020		-		-		-	-	-	-
University of Illinois	C/CPFF	University of Illinois : IL	0.400	0.020		0.020		-		-		-	-	-	-
University of Tennessee	C/CPFF	University of Tennessee : TN	0.600	0.020		0.020		-		-		-	-	-	-
Washington State University	C/CPFF	Washington State University : WA	0.400	0.020		0.020		-		-		-	-	-	-
Cadillac Products Incorporated	C/CPFF	Cadillac Products Incorporated : MI	0.200	0.020		0.020		-		-		-	-	-	-
Oregon Freeze Dry Incorporated	C/CPFF	Oregon Freeze Dry Incorporated : OR	0.020	0.020		0.020		-		-		-	-	-	-
Research and Development Associates	C/CPFF	Research and Development Associates : TX	0.020	0.020		0.020		-		-		-	-	-	-
The Wornick Company	C/CPFF	The Wornick Company : AL	0.400	0.034		0.300		-		-		-	-	-	-
Sterling Foods	C/CPFF	Sterling Foods : TX	0.300	0.020		0.020		-		-		-	-	-	-
Virginia Polytechnic Institute and State University	C/CPFF	Virginia Polytechnic Institute and State University : VA	0.020	0.020		0.020		-		-		-	-	-	-
Male Duck Inc.	C/FP	Male Duck Inc. : VA	0.100	0.100		0.100		-		-		-	-	-	-
Analytic Strategies, LLC	C/FP	Analytic Strategies, LLC : VA	0.344	-		0.100		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 1 / *Combat Rations (CORANET)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Alion Science and Technology Corporation	C/CPFF	Alion Science and Technology Corporation : IL	0.000	-		0.473		-		-		-	-	-	-
		Subtotal	5.004	1.154		1.593		-		-		-	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	5.004	1.154		1.593		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 1 / *Combat Rations (CORANET)*

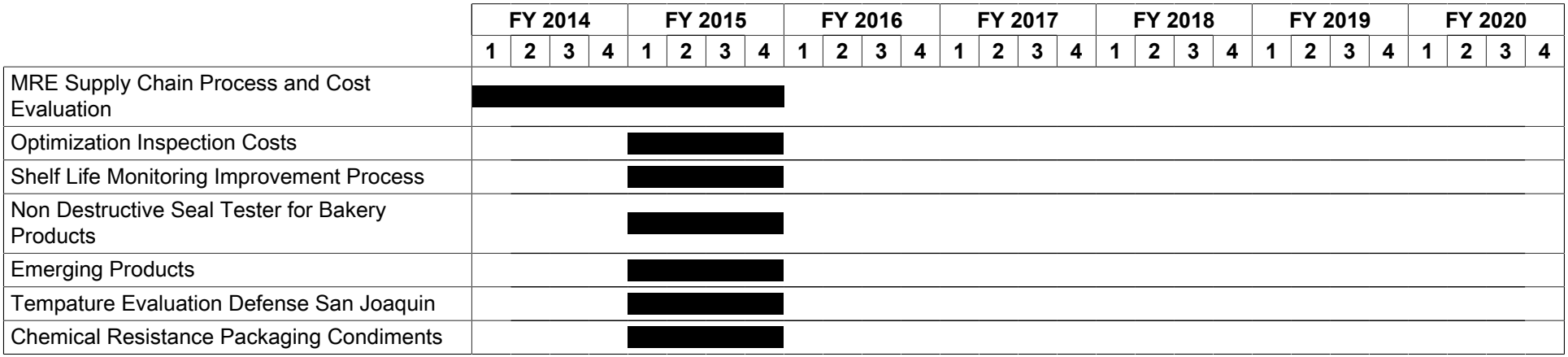

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 1 / *Combat Rations (CORANET)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
MRE Supply Chain Process and Cost Evaluation	1	2014	4	2015
Optimization Inspection Costs	1	2015	4	2015
Shelf Life Monitoring Improvement Process	1	2015	4	2015
Non Destructive Seal Tester for Bakery Products	1	2015	4	2015
Emerging Products	1	2015	4	2015
Tempature Evaluation Defense San Joaquin	1	2015	4	2015
Chemical Resistance Packaging Condiments	1	2015	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
2: *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*	11.231	3.944	3.421	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Department of Defense, through the Defense Logistics Agency, spends upwards of $2 billion per year on military uniforms and individual equipment. The lead-time is up to 15 months for these items. The CDUM program concluded in October 2014 and continuing CDUM projects have been transitioned into the Military Uniform System Technology (MUST) Program. The Military Uniform System Technology (MUST) Program was initiated in 4th quarter 2014. The strategic objective of the DLA Military Uniform System Technology (MUST) Program is to identify, adapt, and adopt technologies that can significantly reduce the lead-time from development to sustainment from years to months or weeks for the military uniforms and individual equipment. The Program focuses on quick-reaction and technologies that will transform the military uniform supply chain from a two-dimensional (2D), manual environment into a three-dimensional (3D), digital environment. The resulting knowledge based system will develop a neutral platform that will seamlessly communicate military uniform requirements to the military uniform industrial base.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Customer Driven Uniform Manufacturing Accomplishments/Plans	3.944	3.421	-
FY 2014 Accomplishments: The CDUM program successfully completed in October 2014 with the implementation of item level RFID technology in the military Recruit Induction Centers (RICS). These implementations resulted in increased inventory accuracy, ability to meet audit readiness, and significant time savings in in the Services uniform issuing operations.			
FY 2015 Plans: MUST Partner awards were made in late FY 2014. Four MUST STP awards have been made to date to do research on existing processes for the development of item requirements within the Services and DLA as well as research into the accessibility of these requirements by the Military Uniform Industrial Base.			
FY 2016 Plans: Once the as-is processes have been documented the MUST program will develop technologies to transform the military uniform supply chain into a three-dimensional (3D), digital environment, that will provide seamless communication of military requirements to the Military Uniform Industrial Base.			
Accomplishments/Planned Programs Subtotals	3.944	3.421	-

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Improved Service collaboration and reduced lead time to introduce new military uniform and individual equipment items.

Improved Service/DLA collaboration on requirement changes and improved communication of those changes to the industrial base.

Completed projects will transition

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CDUM 1	C/CPFF	Patricio Enterprises : VA	1.681	0.450	Mar 2014	-		-		-		-	-	-	-
CDUM1A	C/CPFF	Patricio Enterprises : VA	0.000	1.370	Feb 2015	-		-		-		-	-	-	-
CDUM 2	MIPR	Alion Scence and Technology Corporation : VA	2.950	0.287	Mar 2014	-		-		-		-	-	-	-
MUST 1	C/CPFF	Advantech, Inc : MD	2.000	0.015	Aug 2014	0.952	Mar 2015	-		-		-	-	-	-
MUST 1A	C/CPFF	Advantech, Inc : MD	0.000	0.495	Sep 2014	0.056	Sep 2015	-		-		-	-	-	-
MUST 2	C/CPFF	Logistics Management Institute d/b/a LMI : VA	3.200	0.015	Aug 2014	1.164	Mar 2015	-		-		-	-	-	-
MUST 2A	C/CPFF	Logistics Management Institute d/b/a LMI : VA	0.000	0.500	Sep 2014	0.300	Sep 2015	-		-		-	-	-	-
MUST 2B	C/CPFF	Logistics Management Institute d/b/a LMI : VA	0.000	0.178	Mar 2014	-		-		-		-	-	-	-
MUST 3	C/CPFF	XSB Inc. : NY	1.400	0.015	Aug 2014	0.555	Mar 2015	-		-		-	-	-	-
MUST 3A	C/CPFF	XSB Inc. : NY	0.000	0.495	Sep 2014	0.300	Sep 2015	-		-		-	-	-	-
MUST 4	C/CPFF	ZWEAVE, INC : VA	0.000	0.015	Aug 2014	-		-		-		-	-	-	-
MUST 5	C/CPFF	Clemson University : SC	0.000	0.015	Aug 2014	0.094	May 2015	-		-		-	-	-	-
MUST 5A	C/CPFF	Clemson University : SC	0.000	0.094	Sep 2014	-		-		-		-	-	-	-
		Subtotal	11.231	3.944		3.421		-		-		-	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*	

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	11.231	3.944		3.421		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*

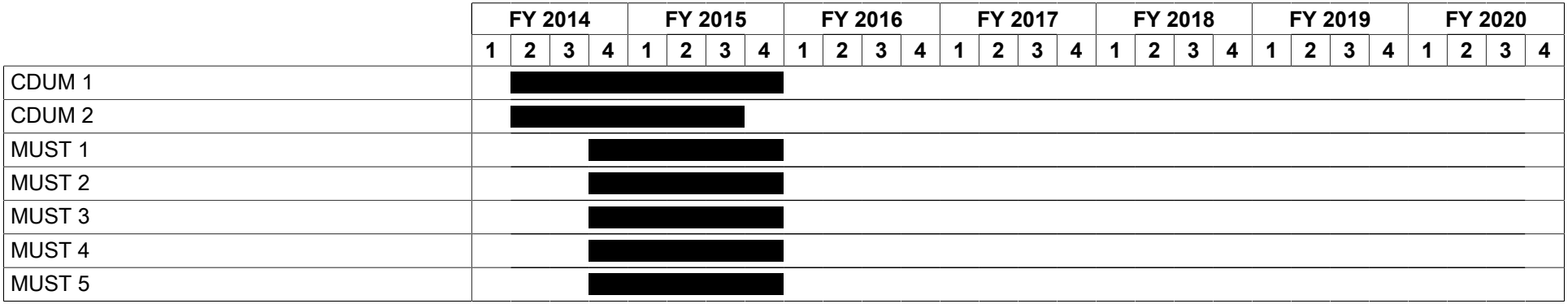

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 2 / *Customer Driven Uniform Manufacturing (CDUM) (Previously called Apparel Research Network)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
CDUM 1	2	2014	4	2015
CDUM 2	2	2014	3	2015
MUST 1	4	2014	4	2015
MUST 2	4	2014	4	2015
MUST 3	4	2014	4	2015
MUST 4	4	2014	4	2015
MUST 5	4	2014	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 3 / *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
3: *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*	7.282	3.045	2.139	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Weapon system spare parts managed by DLA that contain castings are responsible for a disproportionate share of DLA's backorders. Cast parts are ~2% of all hardware National Stock Numbered parts but represent ~4% of all backorders, and when only the oldest backorders are considered up to 10% are castings. PRO-ACT develops methods and technologies to improve the supply of cast parts. We take 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 casting suppliers. This program includes tasks in developing new and improved metalcasting capabilities in the areas of inspection, materials, modeling, and design. Once developed these capabilities will support the foundry industry, where the technologies will be tested and implemented.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Procurement Readiness Optimization-Advanced Casting Technology Accomplishments/Plans	3.045	2.139	-
FY 2014 Accomplishments: Completed alpha version of our Integrated Casting Order Network (ICON) and tested its ability to send foundries/contractors active solicitations matched to tooling records. Also validated the improved stress model by comparing and achieving agreement between measured displacements and those displacements predicted by the model during solidification and cooling. The algorithms were integrated into MAGMA's stress model.			
FY 2015 Plans: Plan to complete our additive manufacturing project on ceramic stereolithography for gas turbine engine airfoils, blades & vanes			
FY 2016 Plans: Funding and efforts of the PRO-ACT program were transferred into the Material Availability Strategic Focus Area.			
Accomplishments/Planned Programs Subtotals	3.045	2.139	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 3 / *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*

D. Acquisition Strategy

Competitive Broad Agency Announcement (BAA) is planned to be drafted this FY. The current contracts reached end of base period of performance on September 30, 2014 but option extensions for two years were exercised, so base contracts will expire during FY16.

E. Performance Metrics

Reductions in lead-times and improvements in manufacturing processes in foundries that produce DOD weapon systems parts.

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 3 / *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Advanced Technology International	C/CPFF	Advanced Technology International : SC	6.567	2.868		2.139		-		-		-	-	-	-
Honeywell International Inc	C/CPFF	Honeywell International Inc : AZ	0.715	0.177		-		-		-		-	-	-	-
		Subtotal	7.282	3.045		2.139		-		-		-	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	7.282	3.045		2.139		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 3 / *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*

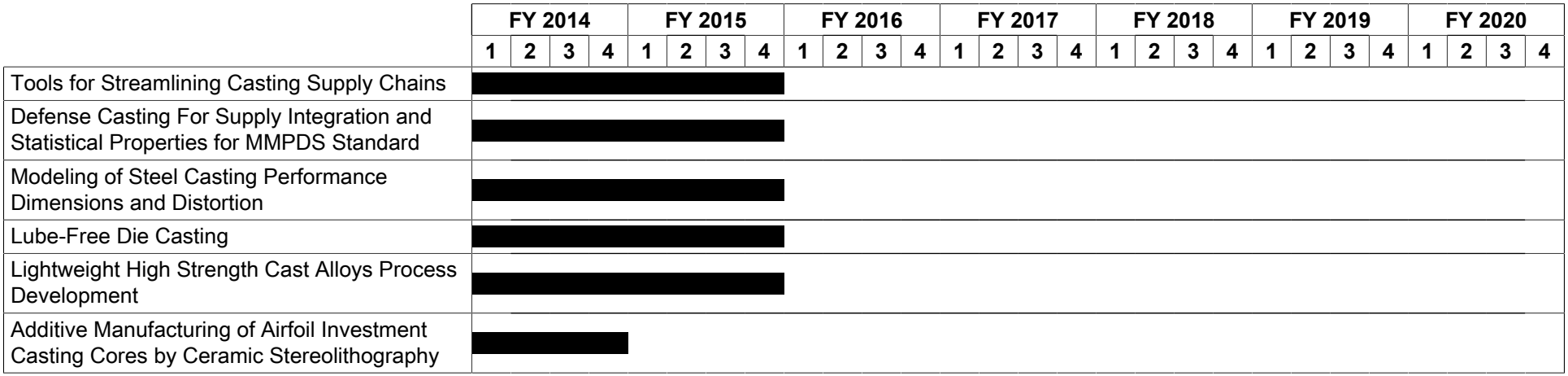

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 3 / *Procurement Readiness Optimization-Advanced System Technology (PRO-ACT)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Tools for Streamlining Casting Supply Chains	1	2014	4	2015
Defense Casting For Supply Integration and Statistical Properties for MMPDS Standard	1	2014	4	2015
Modeling of Steel Casting Performance Dimensions and Distortion	1	2014	4	2015
Lube-Free Die Casting	1	2014	4	2015
Lightweight High Strength Cast Alloys Process Development	1	2014	4	2015
Additive Manufacturing of Airfoil Investment Casting Cores by Ceramic Stereolithography	1	2014	4	2014

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 4 / *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
4: *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*	3.460	1.163	1.026	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Weapon system spare parts managed by DLA that contain forgings are responsible for a disproportionate share of DLA's 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% are forgings. This program develops methods and technologies 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 and expensive 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 2014	FY 2015	FY 2016
Title: Procurement Readiness Optimization-Forging Advanced System Technology Accomplishments/Plans	1.163	1.026	-
FY 2014 Accomplishments: Previous projects were completed in FY14 with Final Report received in October 2014. A new base contract was awarded on September 22, 2014 along with one task order contract for two projects. Additional projects will be awarded under new Task Order contracts in FY15. We conduct annual technical reviews in conjunction with an annual Joint Defense Manufacturing Technology Panel (JDMTP) Metals Subpanel review of all metal related ManTech projects.			
FY 2015 Plans: Planned accomplishments for FY15 include initiation of new projects.			
FY 2016 Plans: Funding and efforts of the PRO-FAST program were transferred into the Material Availability Strategic Focus Area.			
Accomplishments/Planned Programs Subtotals	1.163	1.026	-

C. Other Program Funding Summary ($ in Millions)

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 4 / *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*

C. Other Program Funding Summary ($ in Millions)

Remarks

D. Acquisition Strategy

A Competitive Broad Agency Announcement (BAA) was used to competitively award all contracts used to execute these forging projects.

E. Performance Metrics

Reduction in lead-time and improvements in manufacturing processes in forging shops that produce DOD weapon systems parts.

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 4 / *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Advanced Technologies Institute	C/CPFF	Advanced Technologies Institute : SC	3.460	1.163		1.026		-		-		-	-	-	-
		Subtotal	3.460	1.163		1.026		-		-		-	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	3.460	1.163		1.026		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 4 / *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*

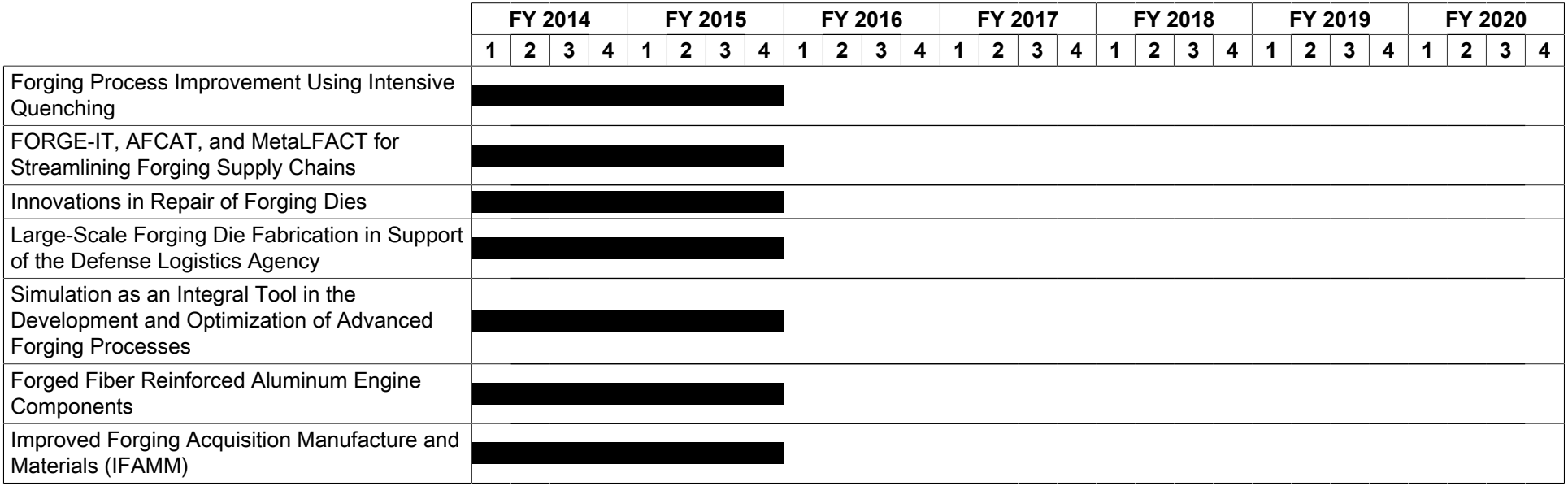

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 4 / *Procurement Readiness Optimization-Forging Advanced System Technology (PRO-FAST)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Forging Process Improvement Using Intensive Quenching	1	2014	4	2015
FORGE-IT, AFCAT, and MetaLFACT for Streamlining Forging Supply Chains	1	2014	4	2015
Innovations in Repair of Forging Dies	1	2014	4	2015
Large-Scale Forging Die Fabrication in Support of the Defense Logistics Agency	1	2014	4	2015
Simulation as an Integral Tool in the Development and Optimization of Advanced Forging Processes	1	2014	4	2015
Forged Fiber Reinforced Aluminum Engine Components	1	2014	4	2015
Improved Forging Acquisition Manufacture and Materials (IFAMM)	1	2014	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 5 / *Material Acquisition Electronics (MAE)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
5: *Material Acquisition Electronics (MAE)*	36.343	10.501	12.185	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

Funding and technical work for the Material Acquisition Electronics (MAE) program has been reallocated to the High Quality Sources Strategic Focus Area. 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 2014	FY 2015	FY 2016
Title: Material Acquisition Electronics Accomplishments/Plans	10.501	12.185	-

FY 2014 Accomplishments:

MAE has transitioned a Dielectrically Isolated TTL Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. The newly transitioned Emulation capability will address several discontinued device families and will increase the potential Emulation production envelope by several hundred NSNs. MAE completed development of a flexible NMOS/PMOS Digital Microcircuit Emulation capability. MAE continued development of additional implementations including higher density Read-Only and Random-Access Memory, Advanced Emitter-Coupled Logic and Closed-Cell CMOS capabilities. MAE continued 350 and 250 nanometer Emulation fabrication process development, bringing new capabilities to the Customers and Agency.

FY 2015 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 transition flexible NMOS/PMOS Digital Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. MAE will also complete development and transition 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 will address several discontinued device families and will increase the potential Emulation production envelope by several hundred NSNs. MAE will also initiate several new implementations including development of Advanced Schottky TTL and TTL-Compatible CMOS Emulation Capabilities. It will

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 5 / *Material Acquisition Electronics (MAE)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
continue prototyping 350 nanometer Emulation circuitry, bringing Emulation capability that re-establishes sources for additional NSNs. ***FY 2016 Plans:*** Funding and efforts associated with Material Acquisition electronics has been moved to the High Quality Sources SFA for FY 16.			
Accomplishments/Planned Programs Subtotals	10.501	12.185	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

Competitively awarded R&D contract.

E. Performance Metrics

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

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 5 / *Material Acquisition Electronics (MAE)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SRI International	C/CPFF	SRI International : CA	31.343	9.951		11.785		-		-		-	-	-	-
SPAWARSYSCEN San Diego	MIPR	SPAWARSYSCEN San Diego : CA	5.000	0.550		0.400		-		-		-	-	-	-
		Subtotal	36.343	10.501		12.185		-		-		-	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	36.343	10.501		12.185		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 5 / *Material Acquisition Electronics (MAE)*

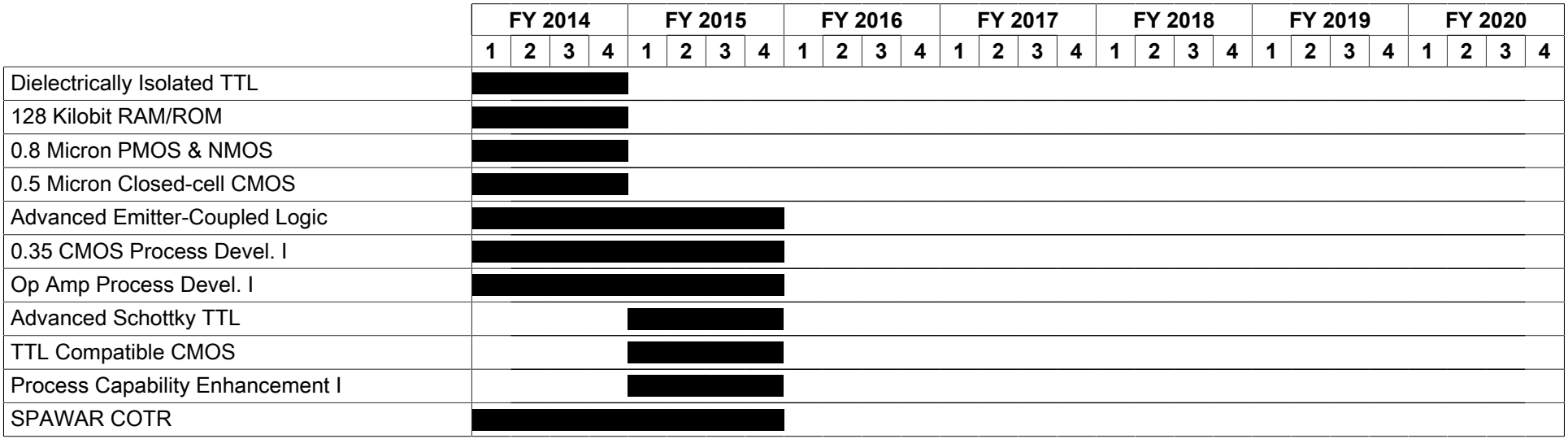

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 5 / *Material Acquisition Electronics (MAE)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Dielectrically Isolated TTL	1	2014	4	2014
128 Kilobit RAM/ROM	1	2014	4	2014
0.8 Micron PMOS & NMOS	1	2014	4	2014
0.5 Micron Closed-cell CMOS	1	2014	4	2014
Advanced Emitter-Coupled Logic	1	2014	4	2015
0.35 CMOS Process Devel. I	1	2014	4	2015
Op Amp Process Devel. I	1	2014	4	2015
Advanced Schottky TTL	1	2015	4	2015
TTL Compatible CMOS	1	2015	4	2015
Process Capability Enhancement I	1	2015	4	2015
SPAWAR COTR	1	2014	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 6 / *Battery Network (BATTNET)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
6: *Battery Network (BATTNET)*	4.472	1.871	2.002	-	-	-	-	-	-	-	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

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 FY2014, DLA received 139,163 orders for 2.85 million batteries at $183M net value - compared to FY13 $176M and FY12 $216M.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: BATTNET Accomplishments/Plans	1.871	2.002	-
FY 2014 Accomplishments: BATTNET developed the production capability at Ultralife and EaglePicher for high energy Li-CFx batteries that double the mission time for soldiers - awarded 2014 Defense Manufacturing Technology Achievement Award. BATTNET developed low-energy capable cells designed to transition to emerging lithium-ion batteries for Defense weapon systems. BATTNET initiated a new project to develop and transition production-scale capabilities in low cost, solvent-free electrode production.			
FY 2015 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 with specific metrics and transition plan for success. BATTNET will also pursue additional battery manufacturing advances from successful DLA SBIR projects.			
FY 2016 Plans: Funding and efforts of the BATTNET program were transferred into the Material Availability Strategic Focus Area.			
Accomplishments/Planned Programs Subtotals	1.871	2.002	-

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 6 / *Battery Network (BATTNET)*

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. Additional projects were awarded to BATTNET partners from FY12 Industrial Base Innovation Fund (IBIF).

E. Performance Metrics

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 6 / *Battery Network (BATTNET)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Alion Science and Technology Corporation	C/CPFF	Alion Science and Technology Corporation : IL	1.032	0.308		0.102		-		-		-	-	-	-
Eskra Technical Products Inc	C/FFP	Eskra Technical Products Inc : WI	0.822	1.332		0.015		-		-		-	-	-	-
EaglePicher Technologies LLC	C/CPFF	EaglePicher Technologies LLC : MO	0.279	0.159		0.420		-		-		-	-	-	-
Quallion, LLC	C/CPFF	Quallion, LLC : CA	0.778	0.010		0.460		-		-		-	-	-	-
Saft America Inc	C/CPFF	Saft America Inc : MD	0.098	0.010		1.005		-		-		-	-	-	-
Redblack Communications Inc	C/CPFF	Redblack Communications Inc : MD	0.430	0.010		-		-		-		-	-	-	-
Logistics Management Institute	C/CPFF	Logistics Management Institute : VA	0.158	-		-		-		-		-	-	-	-
Navitas Systems	C/CPFF	Navitas Systems : MI	0.308	-		-		-		-		-	-	-	-
US Army	MIPR	US Army : MI	0.467	0.042		-		-		-		-	-	-	-
Giner Inc	C/CPFF	Giner Inc : MA	0.100	-		-		-		-		-	-	-	-
		Subtotal	4.472	1.871		2.002		-		-		-	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	4.472	1.871		2.002		-		-		-	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 6 / *Battery Network (BATTNET)*

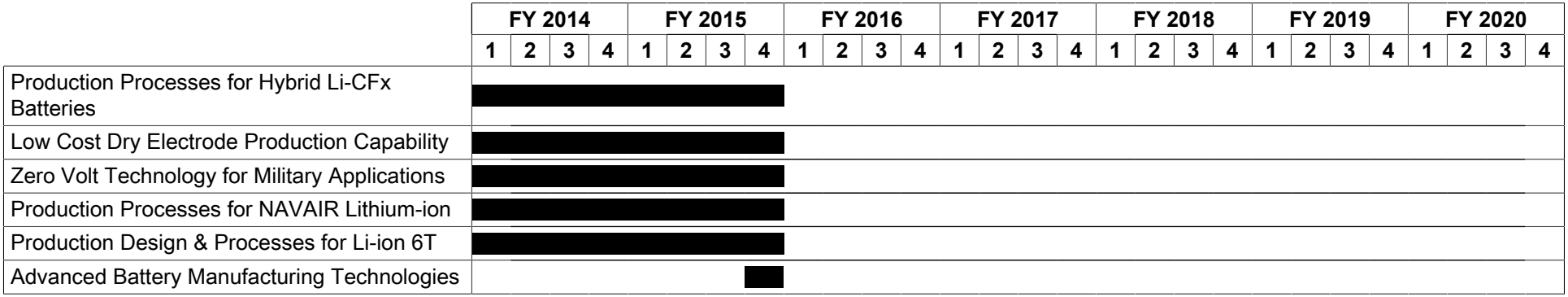

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 6 / *Battery Network (BATTNET)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Production Processes for Hybrid Li-CFx Batteries	1	2014	4	2015
Low Cost Dry Electrode Production Capability	1	2014	4	2015
Zero Volt Technology for Military Applications	1	2014	4	2015
Production Processes for NAVAIR Lithium-ion	1	2014	4	2015
Production Design & Processes for Li-ion 6T	1	2014	4	2015
Advanced Battery Manufacturing Technologies	4	2015	4	2015

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 7 / *Material Availability (MA)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
7: *Material Availability (MA)*	-	-	-	6.875	-	6.875	6.956	7.073	7.293	7.439	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Material Availability (MA) Strategic Focus Area (SFA) are R&D efforts undertaken with DLA's industrial base to reduce material costs, reduce the length and variability of Production Lead-Times and assure the DLA managed products meet requirements, and continuously improve in the quality and reliability. Benefits of this SFA include lower material costs, lower inventory levels and more predictable Customer Wait Times, fewer quality deficiencies and lower customer support costs. This strategic focus area includes within its scope the former Combat Rations Program, the Battery Program, the Castings and the Forgings programs.

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

The Battery network objective is to develop the next generation of battery manufacturing technologies for cost and price efficiency, longer shelf life, and lighter batteries with higher energy. The network conducts R&D initiatives to address sustainment gaps and bridge technical solutions into higher MRLs for specific groups of batteries. For FY2013, DLA received 130,600 orders for 2.76 million batteries at $177M net value.

The Combat Rations network is focused on improving the manufacturing technologies related to the production and distribution of the combat rations that are at the forefront of operations, including Meals Ready to Eat (MREs) and 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.

The Castings consortium objective is to develop methods and technologies to improve the supply of cast parts; looking at root causes of supply issues inside DLA and at casting suppliers. This program includes tasks to develop new and improved metalcasting capabilities in the areas of inspection, materials, modeling, and design. Once developed these capabilities will support the foundry industry, where the technologies will be tested and implemented. Weapon system spare parts managed by DLA that contain castings are responsible for a disproportionate share of DLA's 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% are castings.

The Forgings consortium objective is to develop methods and technologies to improve the supply of forged parts; looking at root causes of supply issues inside DLA and at 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 and expensive item) and for simulation of metal flow inside the forge die to eliminate trial and error development of the die. Weapon system spare parts managed by DLA that contain

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

forgings are responsible for a disproportionate share of DLA's 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% are forgings.

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 2014	FY 2015	FY 2016
Title: Material Availability (MA)	-	-	6.875
FY 2014 Accomplishments: New Start in FY 16			
FY 2015 Plans: New Start in FY 16			
FY 2016 Plans: The Battery network plan is to identify and award new Short Term Projects (STP) with an expected duration of 18-24 months and an average annual funding of $200K-$500K. Proposals are required to include a business case with specific metrics and transition plan for success. The Battery network will also pursue additional battery manufacturing advances from successful DLA SBIR projects selected in FY2014. FY 17: 2.070 FY 18: 2.107 FY 19: 2.159 FY 20: 2.202 The Combat Rations network plan is to complete STP 4018 and begin implementation. Complete STP 4017 and establish follow-on Project which will incorporate Inspection Improvement recommendations into a quality process review for effective and efficient implementation of the new Food Safety Act requirements. Develop long term programmatic improvements in conjunction with DLA Troop Support in order to establish the highest priorities for limited R&D funding. Non-Destructive Seal Tester for Bakery Products and other related ration improvements should be factored in when funds are available. FY 17: 1.654 FY 18: 1.681 FY 19: 1.739 FY 20: 1.774 The Castings consortium plan is to identify and award new Short Term Projects with an expected duration of 18-24 months. Proposals are required to include a business case with specific metrics and transition plan for success. FY 17: 2.220 FY 18: 2.257 FY 19: 2.333 FY 20: 2.380 The Forgings consortium plan is to identify and award new Short Term Projects with an expected duration of 18-24 months. Proposals are required to include a business case with specific metrics and transition plan for success. The Forging consortium will also pursue additional forging manufacturing advances from successful DLA SBIR projects selected in FY2014. FY 17: 1.064 FY 18: 1.082 FY 19: 1.119 FY 20: 1.141			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
The Additive Manufacturing plan is for DLA to partner with the Military Services to use AM to produce parts. DLA and the Services will identify candidate parts, convert technical data to 3D format to facilitate AM, procure the parts, and document the process for AM benefits. The Services will review newly created technical data packages (TDP), test the parts, and qualify AM as an acceptable process to produce the parts. FY 16 – FY 20: Funding for Additive projects will be reallocated from other MA SFA thrusts and classified into the Additive Manufacturing Thrust.			
Accomplishments/Planned Programs Subtotals	-	-	6.875

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 Combat Rations network acquisition strategy is delivery orders against competitively awarded IDIQ R&D contracts.

The Castings consortium plan is a competitive Broad Agency Announcement (BAA). Evaluations were completed and two contracts were awarded competitively September 2011. The current contracts reach the end of their base period of performance September 30, 2014. Option extensions will be exercised to extend the base contracts.

The Forgings consortium plan is a competitive Broad Agency Announcement (BAA). Evaluations are completed and contract(s) will be awarded soon. The current contract ends September 30, 2014. A Broad Agency Announcement (BAA) was issued on 20 August 2013, with proposals received by 07 October 2013. Contract award(s) is expected 4th quarter FY14. The plan also includes awarding Phase 2 and 3 projects from DLA's Small Business Innovation Research (SBIR) in advanced Forging manufacturing technology.

The Additive Manufacturing plan will partner with the Military Services and use organic and commercial AM parts production capabilities.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

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 Combat Rations 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.

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.

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

At least 30% of the completed projects will transition.
OSD-C financial metrics (obligation and disbursement) will be achieved.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 7 / *Material Availability (MA)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Clemson University	C/CPFF	Clemson University : SC	0.000	-		-		0.020		-		0.020	-	-	-
Michigan State University	C/CPFF	Michigan State University : MI	0.000	-		-		0.020		-		0.020	-	-	-
Rutgers State University of New Jersey Division of Grants & Contracts Accounting	C/CPFF	Rutgers State University of New Jersey Division of Grants & Contracts Accounting : NJ	0.000	-		-		0.400		-		0.400	-	-	-
SOPAKO Inc	C/CPFF	SOPAKO Inc : SC	0.000	-		-		0.020		-		0.020	-	-	-
University of Illionois	C/CPFF	University of Illionois : IL	0.000	-		-		0.020		-		0.020	-	-	-
University of Tennessee	C/CPFF	University of Tennessee : TN	0.000	-		-		0.020		-		0.020	-	-	-
Washington State University	C/CPFF	Washington State University : WA	0.000	-		-		0.020		-		0.020	-	-	-
Cadillac Products Inc	C/CPFF	Cadillac Products Inc : MI	0.000	-		-		0.020		-		0.020	-	-	-
Oregon Freeze Dry Inc	C/CPFF	Oregon Freeze Dry Inc : OR	0.000	-		-		0.020		-		0.020	-	-	-
Research and Development Associates	C/CPFF	Research and Development Associates : TX	0.000	-		-		0.020		-		0.020	-	-	-
The Wornick Company	C/CPFF	The Wornick Company : AL	0.000	-		-		0.400		-		0.400	-	-	-
Sterling Foods	C/CPFF	Sterling Foods : TX	0.000	-		-		0.020		-		0.020	-	-	-
Virginia Polytechnic Institute and State University	C/CPFF	Virginia Polytechnic Institute and State University : VA	0.000	-		-		0.020		-		0.020	-	-	-
Male Duck Inc	C/FP	Male Duck Inc : VA	0.000	-		-		0.100		-		0.100	-	-	-
Analytic Strategies LLC	C/FP	Analytic Strategies LLC : VA	0.000	-		-		0.100		-		0.100	-	-	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 7 / *Material Availability (MA)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Alion Science and Technology Corporation	C/CPFF	Alion Science and Technology Corporation : IL	0.000	-		-		0.521		-		0.521	-	-	-
Eskra Technical Products Inc	C/CPFF	Eskra Technical Products Inc : WI	0.000	-		-		0.015		-		0.015	-	-	-
EaglePicher Technologies LLC	C/CPFF	EaglePicher Technologies LLC : MO	0.000	-		-		0.420		-		0.420	-	-	-
Quallion LLC	C/CPFF	Quallion LLC : CA	0.000	-		-		0.460		-		0.460	-	-	-
Saft America Inc	C/CPFF	Saft America Inc : MD	0.000	-		-		1.020		-		1.020	-	-	-
Advanced Technologies Institute	C/CPFF	Advanced Technologies Institute : SC	0.000	-		-		3.219		-		3.219	-	-	-
		Subtotal	0.000	-		-		6.875		-		6.875	-	-	-

	Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		-		6.875		-		6.875	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

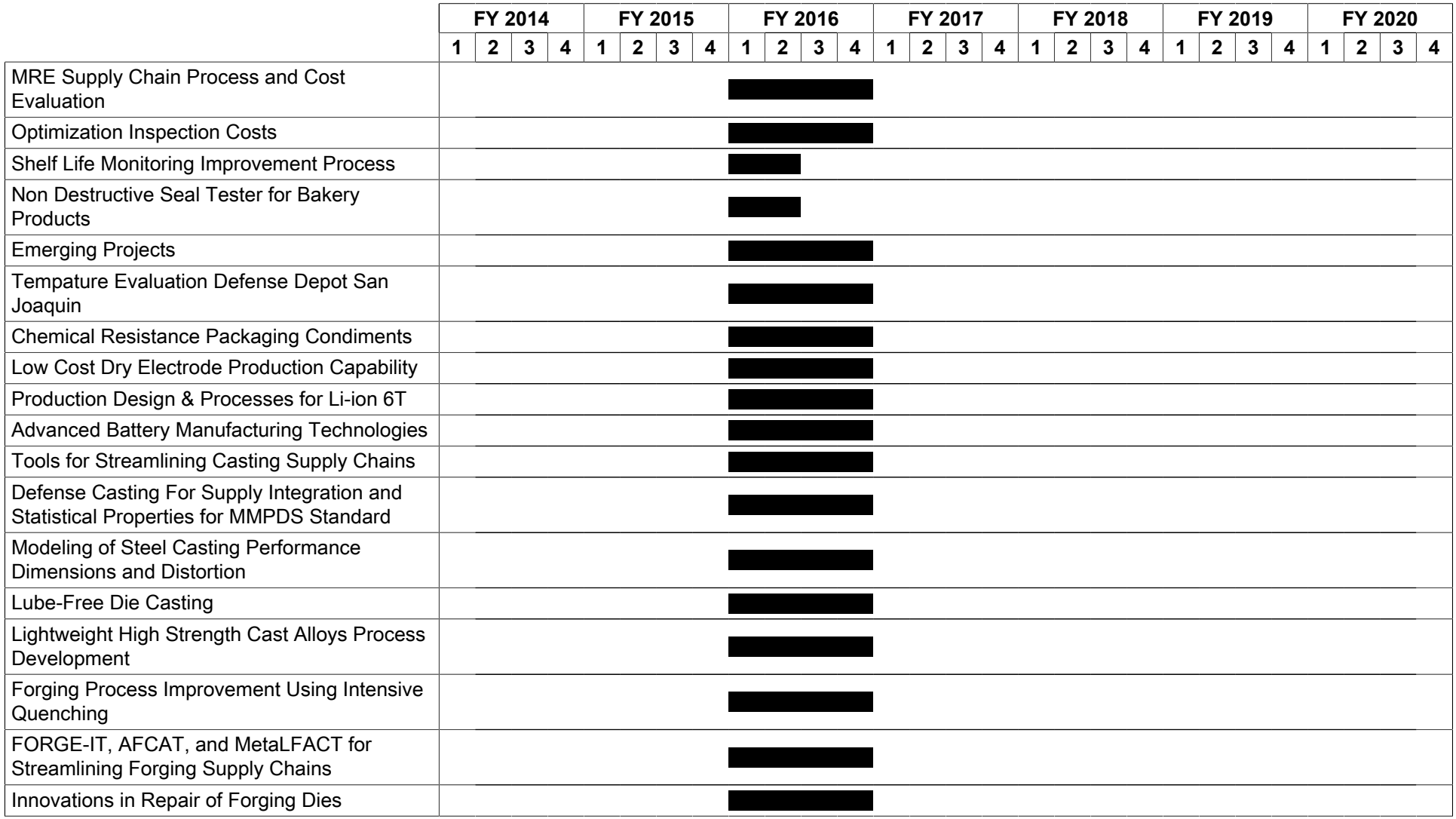

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
Large-Scale Forging Die Fabrication in Support of the Defense Logistics Agency									[redacted]																			
Simulation as an Integral Tool in the Development and Optimization of Advanced Forging Processes									[redacted]																			
Forged Fiber Reinforced Aluminum Engine Components									[redacted]																			

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 7 / *Material Availability (MA)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
MRE Supply Chain Process and Cost Evaluation	1	2016	4	2016
Optimization Inspection Costs	1	2016	4	2016
Shelf Life Monitoring Improvement Process	1	2016	2	2016
Non Destructive Seal Tester for Bakery Products	1	2016	2	2016
Emerging Projects	1	2016	4	2016
Tempature Evaluation Defense Depot San Joaquin	1	2016	4	2016
Chemical Resistance Packaging Condiments	1	2016	4	2016
Low Cost Dry Electrode Production Capability	1	2016	4	2016
Production Design & Processes for Li-ion 6T	1	2016	4	2016
Advanced Battery Manufacturing Technologies	1	2016	4	2016
Tools for Streamlining Casting Supply Chains	1	2016	4	2016
Defense Casting For Supply Integration and Statistical Properties for MMPDS Standard	1	2016	4	2016
Modeling of Steel Casting Performance Dimensions and Distortion	1	2016	4	2016
Lube-Free Die Casting	1	2016	4	2016
Lightweight High Strength Cast Alloys Process Development	1	2016	4	2016
Forging Process Improvement Using Intensive Quenching	1	2016	4	2016
FORGE-IT, AFCAT, and MetaLFACT for Streamlining Forging Supply Chains	1	2016	4	2016
Innovations in Repair of Forging Dies	1	2016	4	2016
Large-Scale Forging Die Fabrication in Support of the Defense Logistics Agency	1	2016	4	2016
Simulation as an Integral Tool in the Development and Optimization of Advanced Forging Processes	1	2016	4	2016
Forged Fiber Reinforced Aluminum Engine Components	1	2016	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 8 / *High Quality Sources (HQS)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
8: *High Quality Sources (HQS)*	-	-	-	12.373	-	12.373	12.482	12.707	13.011	13.271	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The High Quality Sources SFA are projects undertaken to assure that the industrial base can respond to DLA requirements and DLA can fill military customers' material requirements reliably and consistently. Benefits include eliminating cancelled requisitions returned to customers as "non-procurable." This strategic focus area includes within its scope the former Material Acquisition Electronics program.

The Material Acquisition Electronics roadmap has four major thrusts: Advanced Schottky TTL, TTL Compatible CMOS, 512 Kilobit RAM/ROM and Mega Gate ASIC. 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 2014	FY 2015	FY 2016
Title: High Quality Sources (HQS)	-	-	12.373
FY 2014 Accomplishments: New Start in FY 16			
FY 2015 Plans: New Start in FY 16 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 transition flexible NMOS/PMOS Digital Microcircuit Emulation capability into full-scale production increasing DLA's ability to re-establish sourcing of non-procurable microcircuit NSNs. MAE will also complete development and transition 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 will address several discontinued device families and will increase the potential Emulation production envelope by several hundred NSNs. MAE will also initiate several new implementations including development of Advanced Schottky TTL and TTL-Compatible CMOS Emulation Capabilities. It will			

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 8 / *High Quality Sources (HQS)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
continue prototyping 350 nanometer Emulation circuitry, bringing Emulation capability that re-establishes sources for additional NSNs. ***FY 2016 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 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 and 512K Read-Only and Random-Access Memory. MAE will also initiate several new implementations including development of a 1 million gate Application-Specific Integrated Circuit (ASIC) Emulation Capability. It will complete prototyping 350 nanometer Emulation circuitry, bringing Emulation capability that re-establishes sources for additional NSNs. FY 17: 12.576 FY 18: 12.804 FY 19: 13.112 FY 20: 13.374 Strategic Materials: New Start in 2016. A request for white paper proposals was recently added to DLA's Emerging R&D Requirements BAA for critical initial manufacturing technology requirements in domestic high strength carbon fibers. Additional targeted requirements will be determined with DLA Strategic Materials. Targeted requests for proposals will be conducted to address specific needs and opportunities to ensure that critical strategic materials are available from domestic sources and that process innovations are in place to efficiently produce strategic materials. Manufacturing technologies and capabilities are expected to transition to Title III or specific Weapon System Program funds for industrial base qualification. FY 16- FY 20: Funding will be reallocated based project requirements and reclassified into the Strategic Material Thrust.			
Accomplishments/Planned Programs Subtotals	-	-	12.373

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.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 8 / *High Quality Sources (HQS)*

E. Performance Metrics

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

Strategic Materials: Develop roadmap and transition targeted manufacturing technologies.

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 8 / *High Quality Sources (HQS)*	

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
SRI International	C/CPFF	SRI International : CA	0.000	-		-		11.973		-		11.973	-	-	-
SPAWAR	MIPR	SPAWAR : CA	0.000	-		-		0.400		-		0.400	-	-	-
		Subtotal	0.000	-		-		12.373		-		12.373	-	-	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		-		12.373		-		12.373	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 8 / *High Quality Sources (HQS)*

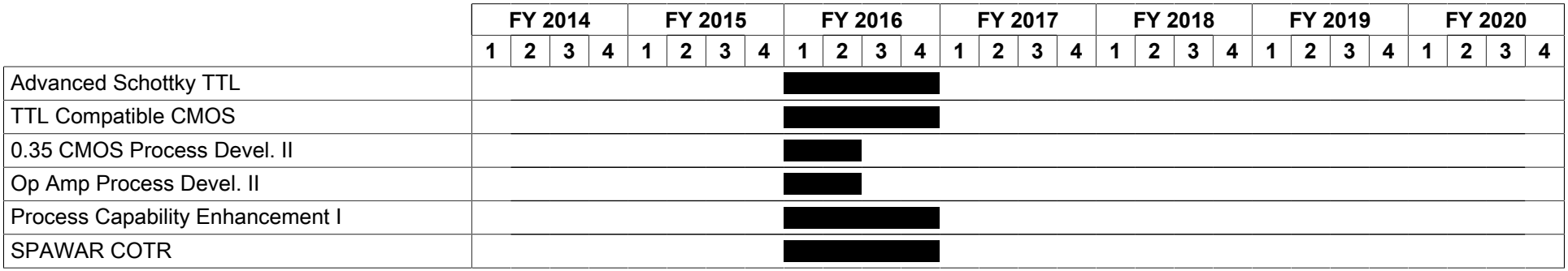

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 8 / *High Quality Sources (HQS)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
Advanced Schottky TTL	1	2016	4	2016
TTL Compatible CMOS	1	2016	4	2016
0.35 CMOS Process Devel. II	1	2016	2	2016
Op Amp Process Devel. II	1	2016	2	2016
Process Capability Enhancement I	1	2016	4	2016
SPAWAR COTR	1	2016	4	2016

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	Project (Number/Name) 9 / *Industry and Customer Collaboration(ICC)*	

COST ($ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
9: *Industry and Customer Collaboration(ICC)*	-	-	-	5.357	-	5.357	5.427	5.515	5.683	5.797	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Industry and Customer Collaboration 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 Uniform System Technology and the Defense Logistics Information Research (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.

This Strategic Focus Area has 5 Roadmaps: Military Uniform System Technology (MUST), Model Based Enterprise, Technical and Logistical Data Interoperability, Proactive Forecasting and Retail Support, and Supplier Operations Interface.

The Military Uniform System Technology roadmap will address GAO Report 12-707 recommendations that DOD to establish a "knowledge based approach" to collaborate on define and communicate of military uniforms. 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. MUST will research enabling technologies and apply them to reengineering technical data requirement management process for the common environment recommended by the GAO.

The Model Based Enterprise will develop capabilities operations to systematically accept, validate, store, item design information 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 designs. The problem with legacy part is that they do not have engineering models so a specific decision has to be made on the economics of 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 Proactive Forecasting and Retail Support will roadmap will identify ways to look ahead at military operations and budgets to systematically identify parts there demand changes can be expected. The alternative is reactively waiting for forecasting to recognize trends which could be after the fact and too late to affect logistics support decisions.
The Supplier Operations Interface Roadmap will work with DLA process owners, the DLA supply chains and the industrial base, to identify the relevant data sets and most desirable methods of providing DLA suppliers with NIIN inventory visibility where the supplier is contractually responsible for providing a specified level of support. Allowing suppliers to more effectively anticipate DLA's requirements will improve both DLA and supplier efficiency.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 9 / *Industry and Customer Collaboration(ICC)*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2014	FY 2015	FY 2016
Title: Industry and Customer Collaboration(ICC) ***FY 2014 Accomplishments:*** New Start in FY 16 ***FY 2015 Plans:*** New Start in FY 16 ***FY 2016 Plans:*** The MUST program will be beginning to build the first increment of the knowledge based environment required by GAO Report 12-707. The basic contracts are in place and the initial development projects from FY 15 will be underway. FY 17: 3.553 FY 18: 3.612 FY 19: 3.735 FY 20: 3.810 The MBE and data interoperability efforts will begin to extract info from Product lifecycle management systems and link the data to Specifications and standards via semantic data models and concepts. FY 17: 1.915 FY 18: 1.946 FY 19: 1.992 FY 20: 2.032 Proactive forecasting and retail support will perform an initial project which will complete the initial characterization and strategy. A follow-on project will be initiated to pursue the priority directions identified in the initial project. Plans for supplier operations interface will be completed, and the first steps taken in implement the plan. FY 16 – FY 20 Funding will be reallocated and reclassified based on identification of specific requirements.	-	-	5.357
Accomplishments/Planned Programs Subtotals	-	-	5.357

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

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

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.

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 9 / *Industry and Customer Collaboration(ICC)*

At least 30% of the completed projects will transition.

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

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 9 / *Industry and Customer Collaboration(ICC)*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
CDUM 1	C/CPFF	Patricio Enterprises Inc : VA	0.000	-		-		0.881		-		0.881	-	-	-
MUST 1	C/CPFF	Advantech : MD	0.000	-		-		1.200		-		1.200	-	-	-
MUST 2	C/CPFF	Logistics Management Institute : VA	0.000	-		-		1.200		-		1.200	-	-	-
MUST 5	C/CPFF	Clemson University : SC	0.000	-		-		0.200		-		0.200	-	-	-
DLIR 1	C/CPFF	XSB, Inc : NY	0.000	-		-		1.876		-		1.876	-	-	-
		Subtotal	0.000	-		-		5.357		-		5.357	-	-	-

	Prior Years	FY 2014 Cost	FY 2014 Award Date	FY 2015 Cost	FY 2015 Award Date	FY 2016 Base Cost	FY 2016 Base Award Date	FY 2016 OCO Cost	FY 2016 OCO Award Date	FY 2016 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	0.000	-		-		5.357		-		5.357	-	-	-

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 9 / *Industry and Customer Collaboration(ICC)*

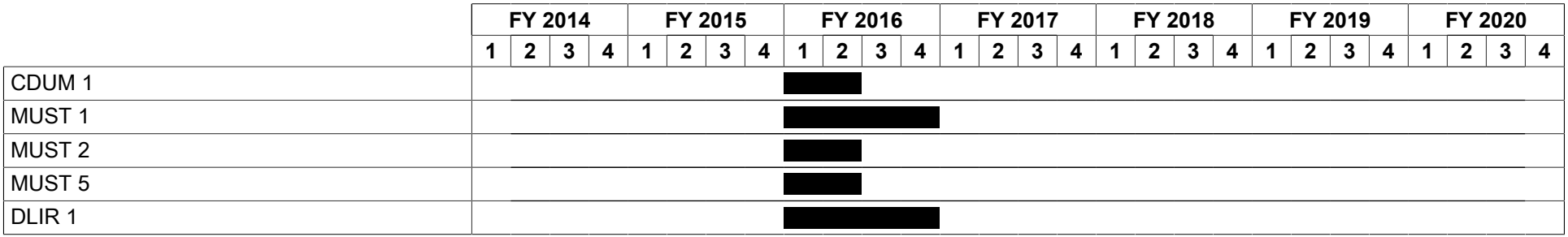

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Logistics Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0708011S / *Industrial Preparedness Manufacturing Technology (IP ManTech)*	**Project (Number/Name)** 9 / *Industry and Customer Collaboration(ICC)*

Schedule Details

	Start		End	
Events	**Quarter**	**Year**	**Quarter**	**Year**
CDUM 1	1	2016	2	2016
MUST 1	1	2016	4	2016
MUST 2	1	2016	2	2016
MUST 5	1	2016	2	2016
DLIR 1	1	2016	4	2016