Exhibit R-2, RDT&E Budget Item Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3		R-1 Item Nomenclature: Logistics R&D Technology Demonstration Program Element: 0603712S					
Cost ($ in millions)	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Total PE Cost	142.449	51.815	23.437	20.407	20.868	21.349	21.935
Project 1: Material Acquisition: Electronics (realigned to IP/Mantech BA 7)	9.940	0.000	0.000	0.000	0.000	0.000	0.000
Project 2: Weapon System Sustainment (formerly Aging Aircraft)	5.178	5.228	5.469	5.557	5.652	5.765	5.888
Project 3: Medical Logistics Network (MLN) (formerly Virtual Reality Medical Assembly)	2.882	2.859	2.955	2.968	3.002	2.919	2.977
Project 4: Competitive Sustainment (CS)	1.170	0.000	0.000	0.000	0.000	0.000	0.000
Project 5: Defense Microelectronics Activities (DMEA) (FY 06 under PE 0603720S)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
Project 6: Diminishing Manufacturing Source Data (DMS)	0.978	0.000	0.000	0.000	0.000	0.000	0.000
Project 7: Supply Chain Mgmt. (SCM)	3.382	3.092	3.727	2.735	2.889	3.146	3.357
Project 8: Agent Based Logistics Processes	0.000	0.000	0.000	1.650	1.700	1.734	1.769
Project 9: EMASS (Completion Project)	0.479	0.000	0.000	0.000	0.000	0.000	0.000
Project 10: Other Congressionally added programs	36.489	30.121	0.000	0.000	0.000	0.000	0.000
Project 11: Continuous Acquisition & Lifecycle Support (CALS)	3.913	3.881	4.000	0.000	0.000	0.000	0.000
Project 12: Strategic Distribution & Reutilization (SDR)	0.000	2.911	3.100	3.050	3.100	3.162	3.225
Project 13: Energy Readiness Program (ERP)	0.000	1.449	1.846	2.112	2.195	2.246	2.295
Project 14: Defense Logistics Information Research (DLIR) (formerly titled Electronic Commerce under PE 0305840S)	0.000	2.274	2.340	2.335	2.330	2.377	2.424

Exhibit R-2, RDT&E Budget Item Justification	Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3	R-1 Item Nomenclature: Logistics Research & Development (Log R&D) Technology Demonstration Program Element: 0603712S

A. Mission Description and Budget Item Justification: The Department of Defense (DoD) logistics vision calls for providing flexible, cost effective, and prompt materiel support, logistics information and services, achieving the leanest possible infrastructure and the employment of the best commercial and government sources and practices. The Defense Logistics Agency (DLA) Logistics R&D program will develop and demonstrate high risk, high payoff technology that will provide a significantly higher level of support at lower costs, than would be otherwise attainable. Focused Logistics is one of the five basic tenants of Joint Vision (JV) 2020. The DLA Logistics R&D program contributes directly to achieving JV 2020's vision of logistics "support in hours or days versus weeks." The objective of the Advanced Logistics Program is a collaborative environment that will allow the DLA Operations community, Logistics planning community, and Transportation Command (TRANSCOM) seamlessly interact on operations planning and execution of wartime operations. In addition, DLA will use the same system in peacetime to significantly reduce logistics response time and reduce the cost of DLA operations while maintaining readiness.

B. Program Change Summary:

	FY 05	FY 06	FY 07
Previous PB 06	142.559	22.360	19.163
Current PB 07	142.449	51.815	23.437
Total Adjustment	-0.110	29.455	4.274
Congressional Increase		30.560	
Program Adjustments		-1.105	4.274

Change Summary Explanation:
FY 05: Congressional reduction – Transfer to the Department of Energy.
FY 06: Program Adjustments: Section 8301 - 1% Congressional Withhold (-$0.335) and Section 8125 - Economic Assumptions (-$0.770).
Congressional Increase: Congressional additions
FY 07: Program Adjustments: Non-pay purchase Inflation

C. Other Program Funding Summary: Provided at the Project Level.
D. Acquisition Strategy: N/A
E. Performance Metrics: Not required for this budget activity.

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Material Acquisition: Electronics, Project 1 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 1: Material Acquisition: Electronics (MAE)	9.940	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

Mission Description and Budget Item Justification: Develop capability to emulate most obsolete digital Integrated Circuits (ICs) in the Federal catalog using a single, flexible manufacturing line. DoD has estimated that $2.9 billion is spent every five years in redesigning circuit card assemblies. Much of these redesigns are driven by IC obsolescence. The commercial suppliers of ICs typically terminate production lines every 18 months, moving on to the next generation of ICs. Because DoD maintains weapons systems much longer than 3 years, this creates an obsolescence problem that can only be overcome through buying excessive inventories of parts before the production lines close or redesigning the next higher assembly to eliminate the obsolete part. DLA, as the manager of 88 percent of the IC supply class, must have a capability to manufacture these devices. This project develops this capability and will expand it to succeeding generations of obsolete ICs through the Advanced Microcircuit Emulation program. Beginning in FY 2006, this project is aligned with Industrial Preparedness PE 0708011S.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	9.940	0.000	0.000	0.000
RDT&E Articles Quantity – N/A				

The MAE project covers development of IC fabrication technology to continue to expand the capability to emulate succeeding generations of discontinued technology. This will include Low Rate Initial Production of earlier development efforts (e.g., 200 thousand emulation Array) and integration of Advanced Tooling and development of future capabilities (e.g., High Speed/ High Density Emulation Arrays). Technology development will continue to deeper sub-micron (<1.0 um) feature sizes and faster operating speeds. Development of IC design capability and design model library to realize emulation performance and functional requirements outcomes using developed IC fabrication technology. This design capability will address both standard catalog ICs and Application Specific Integrated Circuits (ASICs) and will accommodate both in-house and third-party (principally Original Equipment Manufacture) design requirements. Technical development is ahead of schedule for 0.4 micron arrays. Radiation Hardened microcircuit development progressing well and should be completed in FY 2006. Significant advances have been made in ASIC characterization. It is likely we will be asked to develop emulated products to replace a discontinued line of AMCC devices for military use.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Weapon System Sustainment (formerly Aging Aircraft), Project 2 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 2: Weapon System Sustainment (WSS)	5.178	5.228	5.469	5.557	5.652	5.765	5.888
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: Supports DLA Strategic Plan Goals 1 and 2. The program spans multiple weapon systems and supply chains to improve internal processes, provide methods, reduce costs and lead times, and ultimately, improve readiness for DLA customers.

The program is focused in three project areas:

- Process improvement: The program delivers technologies that enable the workforce to provide a faster response to customer requirements at a lower cost.
- Sustaining engineering: Includes material substitution; tooling; reliability analysis and trends; creation, maintenance, and modernization of technical data used in procurement; value engineering, reverse engineering, and source qualification.
- Advanced manufacturing: Implementing manufacturing techniques for problem parts to improve item supportability quickly and inexpensively.

The program has expanded its focus from aviation to all DLA hardware supply chains; the title has been changed to reflect the expanded focus.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	5.178	5.228	5.469	5.557
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments: ($5.178)

- Process Improvement ($2.047):
  - Investigated and refined existing processes in order to employ a more proactive approach to hardware availability and supply. This focus area improves DLA's ability to predict DoD customer needs for increasing fleet maintenance requirements for aging weapon systems. It also includes characterization of items of supply unique to the problems associated with maintenance requirements for aging weapon systems and their impact on DoD customer metrics such as fleet readiness levels, depot repair cycle time and cost.

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Weapon System Sustainment (formerly Aging Aircraft), Project 2 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 2: Weapon System Sustainment (WSS)	5.178	5.228	5.469	5.557	5.652	5.765	5.888
RDT&E Articles Quantity - N/A							

- Sustaining Engineering ($2.158):
  These functions include engineering analyses and assessments of materials, components, tooling, etc. required to manufacture parts; reliability analyses; analysis of failure trends; creation, maintenance, and modernization of technical data used in procurement; value engineering; reverse engineering; manufacture and testing of prototype and first article parts; and qualification of new parts and sources. The Defense Supply Center Richmond's (DSCR) Sustaining Engineering Center of Excellence was established, successfully demonstrated its value to DLA, and is being continued under DSCR guidance.
- Advanced Manufacturing ($0.973):
  Demonstrate and validate new and advanced manufacturing capabilities that can dramatically improve DLA's response to customer needs for parts availability and cost reduction. This includes processes and products to shorten Production Lead Time (PLT), reduce parts acquisition and inventory costs, or improve parts reliability.

FY 06-07 Planned Program: Using the project development process recently employed, the program has identified projects which will compete for available funding. The following plans and allocations are based on the available budget ceilings.
FY 2006 Plans: ($5.228)

- Process Improvement ($2.129):
  - The projects initiated in FY 2005 will be completed, and several new projects will be initiated. One of these projects will be to evaluate use of Service retail data and simulate the effect on DLA performance. The other projects will demonstrate methods to improve supplier responsiveness, begin development of next generation inventory model for both Numerical Stock Objective (NSO) and replenishment items for further improvements in inventory structure, and demonstrate methods to identify sudden changes in customer requirements to reduce backorders.
- Sustaining Engineering ($1.826):
  - The projects initiated in FY 2005 will be completed and new projects will be initiated. Class change approval process will be demonstrated for more complex classes and approval processes developed for different types of Original Equipment Manufacturers (OEM) licenses. Additional efforts will be initiated to improve Engineering Support Activity (ESA) collaboration efficiency with DLA. The processes developed for o-ring standardization will be validated and readied for implementation. These enhanced

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Weapon System Sustainment (formerly Aging Aircraft), Project 2 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 2: Weapon System Sustainment (WSS)	5.178	5.228	5.469	5.557	5.652	5.765	5.888
RDT&E Articles Quantity - N/A							

- substitution methods will have a dramatic impact on inventory, procurement costs and backorders.

- Advanced Manufacturing ($1.273):
  - Activities in this area will expand with additional planning for future projects and with the initiation of new projects to investigate the cost and PLT reduction potential of the latest advances in manufacturing capabilities.

FY 2007 Plans: ($5.469)

- Process Improvement ($2.173):
  - Efforts in this area will continue to stress projects that can reduce costs, lead time and inventory to improve supply support to customers, reduce backorders and improve internal efficiencies. Projects are anticipated to improve forecast accuracy through improvements in analysis techniques and use of customer data that is not currently available. Additional projects are expected to result from the improvements that are sponsored by DSCR and other functional areas within DLA.
- Sustaining Engineering ($1.773):
  - This area will emphasize improvements in collaboration with ESAs to reduce administrative lead time, internal costs and sourcing problems through reducing the reaction time and cost of engineering support. Additional item reduction projects are being planned, as are projects to better predict future backorders, with benefits in inventory and procurement costs, backorders and backorder duration. New efforts are expected to support DLA's needs that arise from new responsibilities resulting from realignments within DoD, particularly in the area of technical data.
- Advanced Manufacturing ($1.523):
  - Progress in this area can be very expensive, so projects will be planned in conjunction with related efforts in the Services and other agencies, and will be funded jointly with them. Emphasis will be on established processes whose capabilities and benefits have been demonstrated, but need final maturation before they can be deployed to DLA's vendor base. Projects will demonstrate improvements in production costs or sharply reduce long PLTs.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Medical Logistics Network (MLN) (formerly Virtual Reality Medical Assembly), Project 3 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 3: Medical Logistics Network (MLN)	2.882	2.859	2.955	2.968	3.002	2.919	2.977
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

Requirements Modeling Tool will improve modeling capabilities for estimates of contingency medical materiel requirements, increased data accuracy and clinical relevance. It will be based on the most accurate available estimates of force structure, potential mission, local health risk, expected or likely casualty rates, patient conditions, clinical procedures, and materiel consumption factors. The DoDD 5101.9 directs DLA (as the Economic Assumption (EA) to identity, program for, and invest in the information and analytical tools necessary to implement an effective DoD Class VIII requirements management process. This tool will benefit all services. A requirements management process that is more accurate and relevant to the specific mission(s) allows better planning/programming of limited resources in support of their supported warfighter(s).

Business Reengineering study will result in a study of a concept of operations and physical layout for Medical Logistics in the 21st Century. This will establish viable alternatives for best business practices in Medical Logistics for all the Services. To strike this balance between efficiency and mission requirements, the sharing alternatives must be built upon a firm understanding of military medical logistics, common business functions, business processes and practices, and dependencies between the organizations, while eliminating risks related to business continuity, critical path development, and potential mission disruption. The services have obtained the funding to consolidate medical logistics in one facility. The DoDD 5101.9 directs DLA (as the EA) to establish the strategic and operational relationships necessary to achieve effective Class VIII supply chain support. Also to establish agreements with theater and functional Lead Agent (LA) to act in concert with, and on behalf of, the DoD EA for Medical Materiel. Support of this consolidation, in an integrated way, will enable significant progress towards the goals of the directive. It will provide the EA with an opportunity to get more into the planning process of each of the services, and enhance working relationships to reduce the time it takes to understand the requirement and provide a solution.

Radio Frequency Identification (RFID) technology is receiving substantial attention within military logistics because of the Department of Defense (DoD) mandate for suppliers to use RFID on all pallets and cases beginning in January 2005 or January 2006 depending upon the commodity. The Defense Medical Logistics Standard Support (DMLSS) program is planning to use this technology, not only to meet the DoD directive for medical pallets and cases to be tagged commencing in January 2006, but more importantly, to improve the end-to-end visibility and tracking of medical supplies, resulting in enhanced medical care for the warfighter. In doing so, DMLSS needs to understand the potential issues

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Medical Logistics Network (MLN) (formerly Virtual Reality Medical Assembly), Project 3 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 3: Medical Logistics Network (MLN)	2.882	2.859	2.955	2.968	3.002	2.919	2.977
RDT&E Articles Quantity - N/A							

in implementing RFID to automate and improve the logistics processes and methods to address them. Some of the major problems that we propose to research are listed below. This pilot will offer DMLSS and DLA the unique opportunity to address the risks of implementing RFID, identify and address technology problems early, understand the compliance requirements with the DoD RFID directive, and plan a comprehensive enterprise-wide deployment of RFID. This pilot will help investigate and measure the benefits of RFID when applied in the supply chain of medical materiel.

Med/Surg Item Data Synchronization services for Navy Medical Logistics Command (NMLC) will develop ways to assist the Navy to manage and source items in their medical assemblages. The Navy Medical Logistics Command is the data repository and manager for over 8,000 medical and surgical items for the USNS Comfort and Mercy. The day-to-day data management of these items is a laborious, manual process. Keeping up with cataloging changes, and discovering those changes after-the-fact, is an ever-increasing task. Validating National Stock Numbers (NSN's), checking for product availability, and cross-referencing NSNs to commercial product identification numbers is done by exception.

Defense Medical Logistics Transformation provides a comprehensive, standardized, unified, and policy compliant enterprise architecture, plan and implementation of initiatives to further unify the Medical Logistics Enterprise. The medical logistics community requires a multi-organizational, multi-disciplinary approach to future healthcare supply that spans the military services, the Office of the Secretary of Defense, our coalition partners, and commercial industry and involves diverse, yet complimentary functional disciplines such as cost estimating/financial management, system architecture and design, functional process mapping, transportation, telecommunication, networking, program management, contracting, engineering, and supply chain management.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	2.882	2.859	2.955	2.968
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments: ($2.882)

- Initiating the development of the architecture capabilities to support future Medical Logistics operations and ultimately the Defense Medical Logistics Transformation. ($1.500)

Exhibit R-2a, RDT&E Project Justification							Date: January 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Medical Logistics Network (MLN) (formerly Virtual Reality Medical Assembly), Project 3 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 3: Medical Logistics Network (MLN)	2.882	2.859	2.955	2.968	3.002	2.919	2.977
RDT&E Articles Quantity - N/A							

FY 2005 Accomplishments cont'd:

- Providing the capabilities to develop a peacetime med/surg product data synchronization services at three Navy Medical Facilities for use as "sentinel sites" for readiness analysis (Naval Medical Center Portsmouth, Naval Hospital Jacksonville and Naval Medical Center San Diego). ($0.500)
- Providing the capabilities for planners and logisticians at the Service, Joint, and Defense levels to improve modeling capabilities for estimating contingency medical materiel requirements. ($0.362)
- Providing the capabilities for a redesign of the business relationships in the Medical Logistic Community that will develop recommendations for improved operations of the Medical Logistics function, opportunities for collaboration, eliminate duplication of functions, and improve information management. ($0.197)
- Providing the capabilities for all personnel, equipment and material procurement, and activities required to assist the Defense Medical Logistics Standard Support (DMLSS) Project Office with the development and execution of program and policy initiatives for the life cycle reengineering of the medical logistics business environment using automated identification technologies. ($0.323)

FY 2006 Plans: ($2.859)

- Provide Medical Logisticians the architecture capabilities to support future Medical Logistics operations and ultimately the Defense Medical Logistics Transformation. ($1.400)
- Initiate Defense Medical Logistics Transformation to incorporate the structure and architecture necessary to support expeditionary, modular force concepts integrate the end-to-end Medical Logistics Supply Chain. ($0.800)
- Provide the capabilities for planners and logisticians at the Service, Joint, and Defense levels to improve modeling capabilities for estimating contingency medical materiel requirements. ($0.309)
- Provide the capabilities for all personnel, equipment and material procurement, and activities required to assist the Defense Medical Logistics Standard Support (DMLSS) Project Office with the development and execution of program and policy initiatives for the life cycle reengineering of the medical logistics business environment using automated identification technologies. ($0.350)

Exhibit R-2a, RDT&E Project Justification							Date: January 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Medical Logistics Network (MLN) (formerly Virtual Reality Medical Assembly), Project 3 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 3: Medical Logistics Network (MLN)	2.882	2.859	2.955	2.968	3.002	2.919	2.977
RDT&E Articles Quantity - N/A							

FY 2007 Plans: ($2.955)

- Provide Medical Logisticians the architecture capabilities to support future Medical Logistics operations and ultimately the Defense Medical Logistics Transformation. ($1.405)
- Continue Defense Medical Logistics Transformation Initiatives to incorporate the structure and architecture necessary to support expeditionary, modular force concepts integrate the end-to-end Medical Logistics Supply Chain. ($0.800)
- Provide the capabilities for planners and logisticians at the Service, Joint, and Defense levels to improve modeling capabilities for estimating contingency medical materiel requirements. ($0.385)
- Provided the capabilities for all personnel, equipment and material procurement, and activities required to assist the Defense Medical Logistics Standard Support (DMLSS) Project Office with the development and execution of program and policy initiatives for the life cycle reengineering of the medical logistics business environment using automated identification technologies. ($0.365)

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Competitive Sustainment, Project 4 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 4: Competitive Sustainment (CS)	1.170	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: A competitive source selection process was conducted for the manager of an industry coalition to conduct the work. The project conducts industry/Government pilots in the following five areas: 1) effective supply partnerships; 2) significant improvement in quality and access to technical data; 3) a streamlined maintenance process; 4) upgrade strategies for increased reliability and 5) innovative training. The goals are to reduce total costs of spares/replacements, cut the time from requirement to delivery for supplies, and to cut repair cycle.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	1.170	0.000	0.000	0.000
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments:

- Robust Lean Supply Network-Phase 2 (Identify, assess, and mitigate risks in the supply chain)
  - Project has been successfully transferred to the Missile Defense Agency (MDA) and is currently being used on several MDA weapon systems.

- Contractor Repair Asset Visibility (Create an eXtensible Markup Language (XML) message schema for use in Air Force Contractor Asset Visibility (CAV) II program that communicates status of repairables being serviced at contractor run facilities).
  - Project is complete. Schema has been recommended by Air Force Material Command (AFMC) and approved by Defense Logistics Management Standards Office (DLMSO). Currently waiting for final approval of standard from Accredited Standards Committee for the x12 electronic data interface (ASCx12)

- Common Processes Phase 2 (Create a practical system for Conditioned Based Maintenance (CBM) that uses Commercial Off the Shelf (COTS) applications and can be integrated into any weapon system platform).
  - Project has been demonstrated on the Army M88 HERCULES platform with plans to expand to other Army platforms at the Army's expense. The Navy has approved the test bed scenario and is currently planning shipboard operational testing.

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Competitive Sustainment, Project 4 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 4: Competitive Sustainment (CS)	1.170	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

- Defense Reutilization and Marketing Service Material Security (Develop a risk management process at Defense Reutilization and Marketing Service (DRMS) to identify, access, and mitigate risks in the disposal process).
  - Phase 1 of this project is complete and resulted in an overall strategic vision. Phase 2 included the demonstration of two pilot programs and is complete. Phase 3 is the expansion of the pilots and refinement of the overall strategy to be funded in FY 2006 by DRMS.

FY 2007 Plans: N/A

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3				Project Name: Defense Microelectronics Activity (DMEA) Project 5 0603712S			
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 5: Defense Microelectronics Activities (DMEA) (FY 06 – Aligned under PE 0603720S)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

The Defense Microelectronics Activity **(**DMEA) mission is to leverage advanced technologies to extend the life of weapon systems, to solve operational problems (e.g., reliability and maintainability) and to address diminishing manufacturing sources. The DMEA provides technical and application engineering support for the implementation of advanced microelectronics research technologies from design through assembly and installation. The DMEA manages an organic capability to support these strategically important technologies within the DoD. These advanced technologies are translated into solutions for military needs. DMEA's RDT&E program is comprised of a mix of studies, investigations, planning efforts, developments, fabrications, and the insertions of solutions. This effort applies to all DoD systems using electronics e.g., F-22, B-2, AWACS, F-16, F-15, F-14, GPS, USQ-113, JAST, EA-6B, M-65, AN/TSC-93B, and AN/GSC-49 (V). Funds are required for technical and analytical support, equipment, supplies, travel, and publications.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	78.038	0.000	0.000	0.000
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments:

- Center for Nanoscience Innovation efforts are to systematically clarify the feasibility of applying nanoscience and technology to defense requirements. ($8.315)

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3				Project Name: Defense Microelectronics Activity (DMEA), Project 5 0603712S			
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 5: Defense Microelectronics Activities (DMEA)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continued)

- Advanced Spray Cooling Technology efforts develop standardized spray cooling technology products, demonstrate them in cross-platform migrations and develop an automated process for integration of spray cooling products into military systems. ($6.163)

- Optimizing Electronics for Advanced Controlled Environment Systems (ACES) efforts are to resolve thermal issues regarding electronics densification & advanced electronics packaging in military high-performance computing applications by designing components, chip-scale packaging, stacked structures, and electronic environmental systems that can withstand the demanding military thermal environments. ($6.652)

- Ultra-low Power Battlefield Sensor Communication System (ULBPSCS) efforts are to develop a netted battlefield sensor system with a combination of ultra-sensitive receivers, ultra-low power miniature sensors, advanced manufacturing processes, and a real-time mission critical distributed information system. ($20.543)

- Miniaturized Wireless Communications System (Chameleon) efforts are to develop a covert self-contained microsensor package with on-board real-time mission critical information processing and an ultra-sensitive high temperature super-conducting transceiver. ($7.532)

- Ferrite Diminishing Manufacturing Program efforts will be the identification, assessment, and demonstration of advanced technologies to facilitate improved electronics and microwave subsystems for size, weight and power (SWaP) improvements in the electronics required to support the ferrite devices for future satellite and weapon system programs.

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3				Project Name: Defense Microelectronics Activity (DMEA), Project 5 0603712S			
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 5: Defense Microelectronics Activities (DMEA)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continued)

- Diminishing Manufacturing Program efforts will be the identification, assessment, and demonstration of advanced technologies to facilitate improved electronics and microwave subsystems for size, weight and power (SWaP) improvements in the electronics required to support the ferrite devices for future satellite and weapon system programs including communication and sensor applications. ($1.467)

- Advanced Microelectronic Feature Size Migration efforts are to implement a comprehensive growth plan for increasing the functional density of digital, analog, and mixed-signal semiconductor processes to provide long-term support of advanced microelectronics for military systems. ($0.978)

- Advanced Microelectronic Yield Enhancement efforts are to develop an enhanced ability to produce prototypes and low-volume production of non-industry supported microcircuits for use in military and defense applications by increasing the number of yielding devices per wafer lot and reducing the amount of time needed to produce good first-pass process runs. ($0.978)

- Miniature Tunable Radio Frequency (RF) Front End efforts are to develop a complete suite of tunable hardware and software that leads to families of miniature, tunable RF front ends that enable communication devices that are much smaller, consumes less battery power and solves many of the problems facing military communications today. ($2.495)

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3				Project Name: Defense Microelectronics Activity (DMEA), Project 5 0603712S			
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 5: Defense Microelectronics Activities (DMEA)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continued)

- High Temp Superconductor (HTS) Transceiver efforts are to develop and demonstrate the key building blocks leading to the development of an HTS transceiver, which will enable very pure, linear, efficient wireless signal production as well as reception, not possible with any other technology. ($0.978)

- Long-Term Support of Microelectronic Technology Research efforts are to ensure rapid insertion of transformational technologies into fielded weapon systems by providing the necessary development, manufacturing engineering, and long-term support structure. ($5.820)

- Nano-structured Carbon for Radiation Shielding of Microelectronics efforts are to develop carbon nanotubes and fullerenes for light-weight radiation shielding of microelectronics, allowing the use of non-radiation hardened electronics in severe radiation environments such as space. ($1.956)

- Optical Manufacturing for Extreme UV Lithography efforts are to develop optical and electronic manufacturing technologies, design and process optimization approaches, and associated hardware and software facilities that provide a revolutionary Integrated Telescope Electronics Assembly (ITEA) solution capable of significantly reducing the overall size, weight, and power of Next Generation strategic and tactical missile seeker and sensor systems. ($2.935)

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3				Project Name: Defense Microelectronics Activity (DMEA), Project 5 0603712S			
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 5: Defense Microelectronics Activities (DMEA)	78.038	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

B. Accomplishments/Planned Program: (continued)

- Ruggedized Military RFID Tags efforts are to develop military-capable RFID tags that are rugged, long range, low cost, possess low-power non-volatile memory and operate under extremes of temperature and radiation. ($3.326)

- Secure Digital Coherent Optical Communications efforts are to develop secure optical/RF architecture and operational concepts, study key performance-enhancing algorithms and protocols, and demonstrate key components leading to a secure, high-performance optical communications in fiber, air, and space. ($2.911)

- Smart Scan Radio Frequency Identification (RFID) Tag Reader efforts are to develop a smart scanning RFID tag reader (SSTR) to address DoD requirements. This SSTR will also consolidate all antenna and reader hardware in one unit and provide the system integrator with equipment that will help the network to adapt to the required RF environment to obtain a 100% read rate. ($2.054)

- Superlattice Nanotechnology efforts are to develop and characterize Silicon Carbide (SiC) wafers grown from SiC templates using low-temperature processes with minimum defects that will form the basis for the next generation of RF and radiation-hardened microelectronics. ($2.935)

C. Other Program Funding Summary: N/A
D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Diminishing Manufacturing Source Data (DMS), Project 6 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 6: Diminishing Manufacturing Source Data (DMS)	0.978	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: As aircraft, ships, and other vehicles are being expected to operate much longer than originally designed, the supply of parts for these systems has become a significant problem. When systems and components can no longer be obtained they are called diminishing manufacturing source (DMS) problems. Throughout the military, there are literally hundreds of independent operations attempting to solve steadily worsening DMS problems. Because these operations are very "stove-piped" in their existence, they do not share information across weapon systems, even though many parts are common. The only method to decrease this ever expanding cost to solve DMS problems would be to have a central repository of part solutions, shared across all weapon systems and all services. In order to create a central repository of military parts, a very large data warehouse will need to be created and populated with solutions to these DMS part problems.

B. Accomplishments/Planned Program:

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.978	0.000	0.000	0.000
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments:

- Developed a training portal for DMSMS and trained 2,000 people in subjects such as DMS performance based logistics (PBL) processes
- Established a DMSMS program at Marine Corps at headquarters Albany, Georgia
- Automated modules to streamline the DMSMS notice handling process in Defense Logistics Agency (DLA) and the Air Force.

C. Other Program Funding Summary: N/A
D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Supply Chain Management, Project 7 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 7: Supply Chain Management (SCM)	3.382	3.092	3.727	2.735	2.889	3.146	3.357
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

DLA has organized along Supply Chains to provide an integrated, combat logistics solution that is coordinated among the services and across DoD. There is a need for the Agency to stay abreast of the latest supply chain management principals and techniques that will improve the supply availability of DLA-managed items by managing supply chains to shorten lead times and reduce costs. The dynamic nature of DLA's mission requires a flexible R&D mechanism to rapidly take advantage of the evolving supply chain improvements and innovations.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	3.382	3.092	3.727	2.735
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments: ($3.382)

- Planning systems for Class II and Class III commodities ($1.040)
- Began the Defense Logistics Information Research Program ($0.400)
- Developed detailed planning for the DLA Afloat Initiative ($0.350)
- Advanced technologies for Data Cleansing and standardization ($0.302)
- Develop an advanced kitting process for DoD eMALL ($0.300)
- Advanced concepts and planning for procurement responsibilities for Depot level Repairables ($0.217)
- USMC development of Transportation Planning system ($0.097)
- Other miscellaneous supply chain initiatives ($0.676)

FY 2006 Plans: ($3.092)

- TentNet Efforts to enhance the supply chain for portable shelters so that peacetime and wartime supply availability can be raised to reasonable levels. ($1.500)

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Supply Chain Management, Project 7 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 7: Supply Chain Management (SCM)	3.382	3.092	3.727	2.735	2.889	3.146	3.357
RDT&E Articles Quantity - N/A							

FY 2006 Plans (cont'd):

- Other emerging opportunities for Supply Chain Management such as DLA Afloat, USMC Readiness Initiatives. Emerging RFID technology development. ($1.242)
- Support DLA's Advanced Concept Technology Demonstration by developing supply requirements for Node Management from the perspective of the DLA Logistics Operations Center. ($0.350)

FY 2007 Plans: ($3.727)

- Supply Chain Initiatives and opportunities continue to develop and pursue emerging Supply Chain Management opportunities as they evolve.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: All new start programs are acquired through a Full and Open Broad Agency Announcement.

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Agent Based Logistics Processes, Project 8 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 8: Agent Based Logistics Processes	0.000	0.000	0.000	1.650	1.700	1.734	1.769
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: Project will develop plans and tools for flexible responses to changing supplier and demand data. It will provide the ability to link into war planning systems to address the capability of the industrial base to meet National Emergency Requirements. Project planned to start in FY 2008.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.000	0.000	0.000	1.650
RDT&E Articles Quantity – N/A				

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number EMASS (Completion Project), Project 9 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 9: EMASS (Completion Project)	0.479	0.000	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

Enterprise Mission Assurance Support System (eMASS) is a comprehensive, enterprise-wide capability that automates all major information assurance processes including certification and accreditation, vulnerability management, incident response, and Information Assurance (IA). EMASS is resource planning and management, circuit connection management, contingency planning, and IA command and control. EMASS will provide a single IA exchange standard across the DoD Global Information Grid (GIG) and will be an implementation of Security Assertion Markup Language (SAML), an extensible markup language (XML) based exchange standard. EMASS is being developed through a partnership with Command, Control, Communications and Intelligence (C3I), and will vet the policy requirements of an emerging family of IA policies called the 8500 series.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.479	0.000	0.000	0.000
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments: ($0.479)

- The EMASS program was completed during the year with FY 04 funding and the FY 05 funding. These funds were re-allocated to the Joint Environmental Material Management Service (JEMMS) Program. The R&D program merged the logistics capabilities of the Regional Hazardous Inventory Control Systems (RHICS) and the environmental reporting capabilities of the Hazardous Substance Management System (HSMS) into a single web-enabled, Global Combat Support System (GCSS) compliant solution.

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Other Congressionally Added Programs, Project 10 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 10: Other Congressionally Added Programs (OCAs)	36.489	30.121	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification: Congressionally added programs for the Logistics Research and Development (Log R&D) program element, along with explanation are provided below.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	36.489	30.121	0.000	0.000
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments:

- **Vehicle Fuel Cell Program (VFC)** ($5.136) - Commercialized the use of fuel cells in transportation applications to promote early adoption among military administrative vehicles. Insert the technology into our installation fleets. Ballard, Sunline Transportation, Kettering
- **Diminishing Manufacturing Source Center of Excellence Program (DCE)** ($0.978) - Leveraged state-of-the art technology to provide the warfighters a centralized approach to solving diminishing manufacturing source and obsolete parts problems; maintain a centralized repository for Diminishing Manufacturing and Material Shortages (DMSMS) information; and database systems necessary for the sustainment of our aging military systems. Karta Technologies Inc.
- **Government Industry Data Exchange (GID)** ($2.446) - Joint/Coalition Obsolescence Management Modernization System (JCOMMS) is a Joint program across the Department of Defense that benefits the equipment readiness across DoD, Using Defense Micro-Electronics Activity metrics, 80 percent of current obsolescence cases average at least $440 thousand each and can take months. Using the JCOMMS, a 50 percent time reduction can be realized. The investment in the JCOMMS tool sees a high return on investment, which is easily captured in the first year of implementation. Wyle Labs, IHS Corp.
- **California Manufacturing Technology Center (CMT)** ($6.652) - Improve DoD access to Small Manufacturers in the State of California.
- **New England Manufacturing Supply Chain (NEM)** ($5.478) - Improve DoD access to Small and Medium sized Manufacturers (SMEs) in the New England area; this includes Maine, Vermont, New Hampshire, Massachusetts, Rhode Island and Connecticut.
- **Connectory for Rapid Identification of Technology Sources for DoD (CRI)** ($1.467) - Improve the ability of small to medium enterprises in the United States (US) to do business with the DoD (Buy America Act).
  San Diego State University Research Foundation & East County [San Diego] Economic Development Council

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Other Congressionally Added Programs, Project 10 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 10: Other Congressionally Added Programs (OCAs)	37.467	30.121	0.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

- **Manufacturing Extension Partnership-Midwest Consortium (MEP)** ($1.957) - Fund the WMEP to develop and implement a repeatable and systemic lean manufacturing program to assist small and medium-sized manufacturing companies to better serve as suppliers to their original equipment manufacturers (OEMs) and ultimately the DoD.
- **Spray Technique Analysis & Research for Defense (STAR)** ($0.979) Reduce cost and air pollution by improving the efficiency of spray painting throughout DoD. Southwest Research Institute, Iowa Waste Reduction Center at University of Northern Iowa
- **STAR4D Painting and Coating Pollution Prevention (SPP)** ($0.978) - Reduce cost and air pollution by improving the efficiency of spray painting throughout DoD. Southwest Research Institute, Iowa Waste Reduction Center at University of Northern Iowa
- **Emerging/Critical Interconnection Technology Program (ECI)** ($1.467) - Maintaining North American printed circuit board technical and manufacturing capability to meet current and future DoD Warfighter needs. Association Connecting Industries (ACI) and NAVSEA Crane Indiana
- **Microelectronics Testing, Technology & Obsolescence Program (MTT)** ($5.136) - Establish the Energetic Materials Research and Testing Center (EMRTC) microelectronics laboratory at New Mexico Technology and compliment the US Army White Sands Missile Range (WSMR) microcircuit test capability. Address training and advanced education needs in electronics testing and obsolescence. New Mexico Technology/Energetic Materials Research and Testing Center
- **Next Generation Air Start Craft (NGA)** ($1.370) - Provide development funds to spur support equipment improvements for the warfighter. Phoenix Aerospace
- **Aging Systems Sustainment and Enabling Technologies (ASSET)** ($1.467) - Providing localized assistance to small businesses in economically-depressed areas to qualify suppliers and parts for DLA. Oklahoma State University (OSU)
- **Distributed Inventory Management System (DIM)** ($0.978) - Fund California State University Long Beach (CSULB) to develop a next generation radio frequency identification (RFID) capability that overcomes some of the limitations of the existing RFID technology. CSULB School of Engineering has developed a Concept of Operations and is working with DLA to support the requirement for the Deployable Depot.

C. Other Program Funding Summary: N/A
D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Continuos Acquisition Lifecycle Support, Project 11 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 9: Continuos Acquisition Lifecycle Support (CALS)	3.913	3.881	4.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

Information and information technology impact almost every functional component of the DoD, from tactical units to the supply lines that support them. In fact, Joint Vision 2020's central goal is the capability of collecting, processing, and disseminating a steady flow of information to U.S. forces, while exploiting or denying an adversary's ability to access that information.

To this end, the DoD has embarked on a set of critical and ambitious programs. These programs are to insure that information technology plays a key role in achieving war fighter superiority in the 21st century. Embodied in the DoD 2020 logistics vision are integrated supply chains focused on meeting war fighter requirements at the point of need. This, in turn has caused the DoD to insure that all automated information systems have a degree of "interoperability".

The main goal of the DoD's Information Technology initiatives is a shared data environment. This environment supports the DoD 2020 Logistics Vision and all five key logistics initiatives. It provides users the capability to employ automated tools that accomplish tasks more effectively and efficiently and that exchange current and accurate information in a timelier manner across enterprises.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	3.913	3.881	4.000	0.000
RDT&E Articles Quantity – N/A				

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Continuous Acquisition Lifecycle Support, Project 11 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 9: Continuos Acquisition Lifecycle Support (CALS)	3.913	3.881	4.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

FY 2005 Accomplishments: ($3.913)

- Employed CALS in developing architectures to govern the modernization of integrated supply chain information systems.
- Integrated CALS technologies with dynamic product models.
- Reengineered logistics processes based on CALS modernization technologies.
- Acquisition and Technical Information Management.
- Employed CALS in developing architectures to govern the modernization of integrated supply chain information systems.
- Electronic Commerce and Electronic Data Interchange (international standards, international business processes like transportation and procurement, Accredited Standards Committee (ASC) X12, United Nations (UN)/Electronic Data Interchange For Administration Commerce and Transport (EDIFACT), and Extensible Markup Language [XML]-Electronic Data Interchange [EDI]).

FY 2006 Plans: ($3.881):

In order to satisfy these needs and requirements, DoD is moving to accomplish the following activities:

- A DoD-wide Logistics Environment which includes the following emerging concepts:
  - Force-Centric Logistics (implementation)
  - Logistics Transformation Roadmap
  - Sense and Respond Logistics (S&RL)
  - GIG/Network-Centric Concept (NCOW Reference Model)
  - DoD Enterprise Modeling and Performance Based Logistics

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Continuous Acquisition Lifecycle Support, Project 11 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 9: Continuos Acquisition Lifecycle Support (CALS)	3.913	3.881	4.000	0.000	0.000	0.000	0.000
RDT&E Articles Quantity - N/A							

- Satisfy customer requirements at the point of need.
- Reduce cycle times to meet dynamic warfighting requirements (i.e., customer wait time).
- Replace large investments in infrastructure with information superiority, interoperability, information assurance, security, and accuracy.
- Create robust partnerships with the industrial commercial sector.
- Reduce organizational echelons to only those that benefit the warfighter.
- Provide a high degree of information security and audit capabilities.

FY 2007 Plans ($4.000):

- On-going support to the Joint Logistics Vision 2020.
- Continuation of the DoD Future Logistics Enterprise (FLE) initiative.
- Supply Chain Management and Operational Reference Modeling implementation
- DoD Enterprise Modeling and Performance Based Logistics
- Net Centric Enterprise Services
- DoD Corrosion Exchange Initiative

C. Other Program Funding Summary: (N/A)

D. Acquisition Strategy: (N/A)

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Strategic Distribution & Reutilization, Project 12 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 12: Strategic Distribution & Reutilization (SDR)	0.000	2.911	3.100	3.050	3.100	3.162	3.225
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

This project consists of two related thrusts: Node Management and Deployable Depot (NoMaDD) and Reutilization Risk Reduction. NoMaDD is an anticipated Advanced Concept Technology Demonstrator that will develop, integrate, demonstrate, and transition Information Technology (IT) and field-operable material management that transforms logistics support of expeditionary warfare and humanitarian operations. Reutilization Risk Reduction (R3) is focused on reducing risks that militarily-sensitive equipment will be sold to potential enemies or other parties that could use the surplus material for nefarious purposes.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.000	2.911	3.100	3.050
RDT&E Articles Quantity – N/A				

FY 2005 Accomplishments: N/A. This is an FY 2006 New Start.

FY 2006 Plans: ($2.911)

- ($2.000) NoMaDD will issue a BAA and begin development of the first spiral development with trade studies and concept definitions.
- ($0.911) Reutilization Risk Reduction (R3) will issue a BAA and begin concept definition of the approach to reduce risk associated with selling surplus material.

FY 2007 Plans: ($3.100)

- ($2.100) NoMaDD Complete Concept Refinement and Design and begin Development and Prototyping for Spiral 1; begin Spiral 2. Spiral 1 will focus on extending visibility from the tactical level of support – Combat Supply Support (USMC) Supply Support Activities (US Army) – to the strategic level and develop an initial capability for the Deployable Depot. Spiral 2 will develop tools to support the users' views Tactical and Strategic with the appropriate tools to improve COCOM support.
- ($1.000) R3 Begin testing and implementation of alternative risk reduction techniques.

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Strategic Distribution & Reutilization, Project 12 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 12: Strategic Distribution & Reutilization (SDR)	0.000	2.911	3.100	3.050	3.100	3.162	3.225
RDT&E Articles Quantity - N/A							

C. Other Program Funding Summary: NoMaDD is jointly funded with United States (US) Transportation Command (USTRANSCOM) funding (Program Element (PE) 0603713) in FY 06 ($1.250) and FY 07 ($2.250). The program has been approved as an Office of the Secretary of Defense (OSD) sponsored Advanced Concept Technology Demonstrations (ACTD) and OSD will contribute $2.000/year in funding in FY 06 through FY 08.

D. Acquisition Strategy: R3 will be acquired using a Full and Open Competition Broad Agency Announcement process. NoMaDD will be having a combination strategy of Full and Open Competition for portions of the program. In addition it will team with the US Army's Battlefield Command Sustainment Support System (BCS3) for selected development in order to leverage the current fielding of BCS3.

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Energy Readiness Program, Project 13 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 13: Energy Readiness (ERP)	0.000	1.449	1.846	2.112	2.195	2.246	2.295
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

- Alternate Energy Development (AED) to include synthetic fuel specifications and acquisition plan; continued study of the use of hydrogen by DoD and other directives specified in the Energy Policy Act (EPA) of 2005.
- Testing and approving of additional +100 Thermal Stability Additives (TSA) for use in Jet Propulsion Fuel (JP-8), and additional additive studies for +100 Low Temperature and Static Dissipater.
- Study and implementation of Automated Information and Data Collection (AIDC) to Defense Energy Supply Center (DESC) business processes, which would allow for real time transactional information.

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.000	1.449	1.846	2.112
RDT&E Articles Quantity – N/A				

FY 2005 Plans: N/A

FY 2006 Plans:

- ($1.449) - (.25 AED) Phase II Hydrogen Study – develop and manage a DoD Roadmap and Strategy for Hydrogen, (.493 TSA) Phase II of Study planned to be completed including testing of competitive products, (.75AIDC) Phase I of Execution plan producing Implementation Plan.

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Energy Readiness Program, Project 13 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 13: Energy Readiness (ERP)	0.000	1.449	1.846	2.112	2.195	2.246	2.295
RDT&E Articles Quantity - N/A							

FY 2007 Plans:

- ($1.846) - (.75 AED) Implement recommendation of Phase II report and develop synthetic fuel specifications with industry, (.75 TSA) final report of the Additive Study and initial testing of Low Temperature additive and Static Dissipater additive, (1.5AIDC) Phase II of Execution Plan – select Commercial off- the-Shelf (COTS) hardware and develop Buy Plan, and finalize schedule and begin deployment

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

Exhibit R-2a, RDT&E Project Justification							Date: February 2006
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Defense Logistics Information Research (DLIR), Project 14 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 14: Defense Logistics Information Research (DLIR)	0.000	2.274	2.340	2.335	2.330	2.377	2.424
RDT&E Articles Quantity - N/A							

A. Mission Description and Budget Item Justification:

The DLIR Program objective is to research, identify, and implement potential or existing technologies using high-risk, high-payoff tools, methods, techniques, and products. The DLIR Program will partner with commercial industry to perform short-term projects in various logistics business areas which align with DLA's strategic vision. DLIR improves functional and business processes using the latest technologies available, which support the nation's warfighter. The technical areas of interest are:

- Enhancement of Federal Catalog & Related Logistics Information
- Development of Logistics Data Interoperability & Availability
- Relate Government/Commercial Item Descriptions & Taxonomies to Supplier Capabilities

B. Accomplishments/Planned Program

	FY 05	FY 06	FY 07	FY 08
Accomplishment/ Effort/Subtotal Cost	0.000	2.274	2.340	2.335
RDT&E Articles Quantity – N/A				

FY 2006 Plans: ($2.274)

- Establish three teams, one in each of the technical areas of interest described above, with commercial industry to address opportunities in the area of interest and focus on short-term proposals submitted under Broad Agency Announcement N00164-05-R-6659.
- Award multiple short-term R&D projects to individual team members following opportunity briefings.

FY 2007 Plans: ($2.340)

- Focus on capability gap areas to include:
  - Customer-focused supply chain & logistics data
  - Best-of-breed processes, practices & technology

Exhibit R-2a, RDT&E Project Justification						Date: February 2006	
Appropriation/Budget Activity RDT&E, Defense-wide Budget Activity (BA): 3			Project Name and Number Defense Logistics Information Research (DLIR), Project 14 Program Element: 0603712S				
Cost ($ in millions)	FY 05	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11
Project 14: Defense Logistics Information Research (DLIR)	0.000	2.274	2.340	2.335	2.330	2.377	2.424
RDT&E Articles Quantity - N/A							

FY 2007 Plans (cont'd):

- Comprehensive supply chain visibility & availability
- Logistics data functionality & compatibility to commercial industry data

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A