Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

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

PE 0603713S: Deployment and Distribution Enterprise Technology

DATE: February 2012

BA 3: Advanced Technology Development (ATD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	28.761	29.717	30.678	-	30.678	30.763	31.097	31.918	32.461	Continuing	Continuing
1: Capabilities Based Logistics	4.268	3.074	-	-	-	-	-	-	-	Continuing	Continuing
2: Deployment and Distribution Velocity Management	3.599	3.270	-	-	-	-	-	-	-	Continuing	Continuing
3: Cross Domain Intuitive Planning	1.106	1.302	-	-	-	-	-	-	-	Continuing	Continuing
4: End-to-End Visibility	1.654	1.642	3.067	-	3.067	3.054	3.090	3.126	3.205	Continuing	Continuing
5: Distribution Planning and Forecasting	4.400	4.104	-	-	-	-	-	-	-	Continuing	Continuing
6: Joint Transportation Interface	8.022	6.895	-	-	-	-	-	-	-	Continuing	Continuing
7: Distribution Protection/Safety/ Security	5.712	9.430	-	-	-	-	-	-	-	Continuing	Continuing
8: Command and Control/ Optimization/Modeling and Simulation	-	-	16.687	-	16.687	16.742	16.911	17.357	17.652	Continuing	Continuing
9: Cyber	-	-	1.821	-	1.821	1.826	1.845	1.894	1.926	Continuing	Continuing
10: Global Access	-	-	9.103	-	9.103	9.141	9.251	9.541	9.678	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

Overseas Contingency Operations (OCO) lessons learned and daily operations indicate that current distribution and logistics processes remain outdated and are rarely capable of providing required warfighter support in an agile, efficient and economical manner. Designation of United States Transportation Command (USTRANSCOM) as the Distribution Process Owner (DPO) and shift within the Department to transform the distribution and logistics processes, demands the examination and improvement of the entire supply chain. Unpredictable and extended global distribution routes, limited visibility of sustainment requirements, force packaging limitations, lift constraints, anti-access/aerial denial, complex supply chains, as well as non-networked battlefield command and control (C2), planning, and decision support tools impede timely warfighter logistical support. The centralization of distribution and logistics intermodal research and development facilitates the development/fielding of transformational enhancements to validated distribution capability gaps. The USTRANSCOM Research, Development, Test, & Evaluation (RDT&E) program explores and matures promising technologies to enhance support to combatant commanders and other customers of Department of Defense's (DOD's) distribution and transportation systems.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Defense Logistics Agency

R-1 ITEM NOMENCLATURE

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

PE 0603713S: Deployment and Distribution Enterprise Technology

DATE: February 2012

BA 3: Advanced Technology Development (ATD)

APPROPRIATION/BUDGET ACTIVITY

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	29.109	41.976	30.342	-	30.342
Current President's Budget	28.761	29.717	30.678	-	30.678
Total Adjustments	-0.348	-12.259	0.336	-	0.336
 Congressional General Reductions 	-0.182	-0.081			
 Congressional Directed Reductions 	-	-12.000			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
Reprogrammings	-	-			
SBIR/STTR Transfer	-0.124	-0.178			
Departmental Fiscal Guidance	-	-	0.336	-	0.336
 Efficiency Initiatives SSC Reduction (OSD Withhold) 	-0.042	-	-	-	-

Change Summary Explanation

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

FY2012 FFRDC(f) Reduction: -\$0.081 million

FY2012 Congressional Directed Reduction: -\$12.0 million

FY2012 SBIR/STTR Transfer (Reduction): -\$0.178 million

FY2013 Departmental Fiscal Guidance: \$0.336 million

Exhibit R-2A, RDT&E Project Jus	chibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										
APPROPRIATION/BUDGET ACTIVITY					IOMENCLA [*]	TURE		PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide					3S: Deploym	nent and Dist	tribution	1: Capabilities Based Logistics			
BA 3: Advanced Technology Development (ATD)					Technology						
COST (\$ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
1: Capabilities Based Logistics	4.268	3.074	-	-	-	-	-	-	-	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

The Department requires procedures and technologies which provide enterprise-level capabilities critical to the distribution system to improve performance of the end-to-end DOD supply chain in direct support of the full range of military operations. Ability to rapidly respond to customers' changing demands, with a reliably high level of service. These needs include: capabilities which enhance any supply or transportation mission (aeromedical, air refueling, joint logistics over-the-shore, and seabasing); analysis, tailoring and implementation of selected best enterprise-level practices from industry; and tools/procedures to optimize transportation plus supply (distribution) plans and schedules in support of an entire operation. This project addresses the required mission support to combatant commanders and other customers in the area of capability-based logistics.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013	
Title: Capabilities Based Logistics	4.268	3.074	-	
FY 2011 Accomplishments: Began development of capability to link together dissimilar types of service ship-to-shore causeways. Support AT21 Cooperative Research and Development Agreement (CRADA) efforts. Commenced incremental development of a collaboration with other research labs and academia to focus on augmentation of human intelligence with advanced computer capabilities.				
FY 2012 Plans: Continue to develop ship-to-shore causeways linkage system to support deployment/sustainment of the warfighter in austere locations and joint logistics over the shore. Support AT21 Cooperative Research and Development Agreement (CRADA) efforts. Continue the incremental collaboration with other research labs and academia to focus on augmentation of human intelligence with advanced computer capabilities.				
Accomplishments/Planned Programs Subtotals	4.268	3.074	-	

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

N/A

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	stics Agency	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 1: Capabilities Based Logistics			
E. Performance Metrics Critical enterprise-level distribution system capabilities to improve E requirements.	OOD supply chain performance. Plus focus on rese	earch and development to address warfighting			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency										DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					IOMENCLA 3S: Deploym Technology		tribution	PROJECT 2: Deployment and Distribution Velocity Management				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
2: Deployment and Distribution Velocity Management	3.599	3.270	-	-	-	-	-	-	-	Continuing	Continuing	

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

aamanliahmanta/Dlammad Drammana (¢ in Milliana)

DOD requires procedures/technologies targeted at optimizing throughput at the nodes and through the conduits of the deployment and distribution supply chains, from origin to point of use and return to include: inventory management enhancers (includes node cargo management/tracking); materiel handling innovations (including methods of reducing handling); improved physical access to nodes (includes aircraft all-weather visual systems); port throughput enhancements (includes in-port time reduction methods); and innovative delivery methods (for example, precision airlift, autonomous re-supply). This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/distribution velocity management.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Deployment and Distribution Velocity Management	3.599	3.270	-
FY 2011 Accomplishments: Conducted user evaluation and commence transition activities associated with a common joint cargo handling system, Joint Recovery abd Distribution System (JRaDS) that meets or exceeds the requirements for multiple joint operational concepts. Commenced Joint Capability Demonstration (JCTD) to demonstrate the military application of a commercially available Transportation Management System (TMS) to meet shortfalls in the theater distribution process. Completed development of unique identification number for commodities in supply chain. Commenced partnership with Lincoln Labs for information technology system integration and prototype development.			
FY 2012 Plans: Complete JRaDS development effort and transition capability. Continue demonstration of the military application of a commercial TMS. Continued partnership with Lincoln Labs for information technology system integration and prototype development. Commence a fully integrated solution to plan/order/ship/track/pay for commercial services.			
Accomplishments/Planned Programs Subtotals	3.599	3.270	-

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

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	DATE: February 2012				
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 2: Deployment and Distribution Velocity Management			
D. Acquisition Strategy N/A					
E. Performance Metrics					
Increase force projection and sustainment velocity. Plus focus on r	research and development to address warfighting re	equirements.			

Exhibit R-2A, RDT&E Project Just	DATE : February 2012											
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)					R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology				PROJECT 3: Cross Domain Intuitive Planning			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost	
3: Cross Domain Intuitive Planning	1.106	1.302	-	-	-	-	_	-	_	Continuing	Continuing	

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

Procedures/technologies which improve decision-making and collaboration within the supply chain, from the planning stage to real-time execution and retrograde operations, without need for highly specialized operators of the tools. Projects in this area address following areas: decision support tools for any echelon of the supply chain or decision-maker, distribution process simulations and models for analysis and training, distribution demand forecasting/execution monitoring tools, online training, automated decision-maker support (e.g., queuing, alerting, recommended courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. This project will provide required mission support to combatant commanders and other distribution/ transportation customers in the area of collaborative planning/execution/information sharing/decision support tools.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Cross Domain Intuitive Planning	1.106	1.302	-
FY 2011 Accomplishments: Completed efforts to enhance Fusion Center Operations through work flow engineering. Completed development/assessment to link USMC tactical maintenance status/report information to strategic systems. Began to develop capability to predict maintenance and logistics issues/demand forecasting to optimize supply chain. Commenced efforts to translate commercial gaming into militarily useful capabilities.			
FY 2012 Plans: Complete development of capability to predict maintenance and logistics issues/demand forecasting to optimize supply chain. Begin to develop a planner's capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency.			
Accomplishments/Planned Programs Subtotals	1.106	1.302	_

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

N/A

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 3: Cross Domain Intuitive Planning
E. Performance Metrics Improve decision-making and collaboration within the supply chain a	and focus on research and development to address	s warfighting requirements.

Exhibit R-2A, RDT&E Project Just		DATE : February 2012									
APPROPRIATION/BUDGET ACTIVITY					IOMENCLAT	ΓURE		PROJECT			
0400: Research, Development, Test & Evaluation, Defense-Wide PE 0603713S: Deployment and Distribution						4: End-to-End Visibility					
BA 3: Advanced Technology Development (ATD) Enterprise Technology											
COST (¢ in Millions)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
4: End-to-End Visibility	1.654	1.642	3.067	-	3.067	3.054	3.090	3.126	3.205	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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

Enhanced end-to-end visibility of all aspects of the projection and sustainment is required to improve the effectiveness/efficiency of deployment/distribution/ redeployment operations to ensure warfighter support and confidence. This requires investigation into next generation Automated Information Technology (AIT)/Total Asset Visibility (TAV) technologies and/or container security to improve end-to-end distribution visibility and enhance planning/ execution and transform sustainment operations. Includes the ability to determine immediate, reliable, and accurate shipment status through system access or event management. Develop an overarching process and system architecture which will automate and integrate existing and innovative new programs across the supply chain to provide complete In Transit Visibility (ITV) data, to include visibility of non-DOD cargo during humanitarian/disaster relief operations. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Also need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DOD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

	2011	1 1 2012	1 1 2010
Title: End-to-End Visibility	1.654	1.642	3.067
FY 2011 Accomplishments: Completed next generation Portable Deployment Kit (PDK) effort designed to provide end-to-end visibility in austere/mobile environments. Completed development with Army/Logistics Info Agency of a mobile AIT capability in a military environment in all environments. Started effort to provide capability to read Radio Frequency Identification (RFID) tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Started and completed effort to gain visibility of non-DOD goods during disaster/humanitarian relief operations.			
FY 2012 Plans: Continue effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Begin JCTD to continue development and provide a mobile AIT capability in a military environment and austere locations. Start JCTD to expand on gains made in FY11 on gianing visibility of non-DOD goods during disaster/ humanitarian relief operations. Start JCTD with Army/Logistics Info Agency to expand development of a mobile AIT capability in a military environment in all environments.			
FY 2013 Plans:			

FY 2011

FY 2012

FY 2013

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	s Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	4: End-to-E	nd Visibility
BA 3: Advanced Technology Development (ATD)	Enterprise Technology		

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Complete effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without			
increasing infrastructure.			
Complete JCTD to provide a mobile AIT capability in a military environment and austere locations.			
Accomplishments/Planned Programs Subtotals	1.654	1.642	3.067

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

Provide end-to-end visibility of all aspects of the projection and sustainment of forces and equipment. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: February 2012		
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)				1				PROJECT 5: Distribution Planning and Forecasting			
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
5: Distribution Planning and Forecasting	4.400	4.104	-	-	-	-	-	-	-	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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

There is a lack of collaborative distribution planning, based on an understanding of aggregated customer requirements, for optimizing the end-to-end distribution process. Planning, forecasting and collaboration are insufficiently advanced to fully synchronize people, processes and assets to execute planned operations. Automated tools should be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems. Project investigates the need for flexible end-to-end enhanced modeling and simulation and collaborative decision support tools.

Title: Distribution Planning and Forecasting	4.400	4.104	-
FY 2011 Accomplishments: Commenced process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions. Commenced effort to build a highly configurable, agile Distribution Process Nodal Model capable of expressing and analyzing complex and detailed distribution processes at nodes. Commenced integration of projection and sustainment planning and decision support tools into a federate suite. Continued Modeling and Simulation (M&S) innovation. Commence leveraging existing collaboration & situational awareness technologies to provide dynamic planning and course of action development/ execution capabilities.			
FY 2012 Plans: Continue integration of projection and sustainment planning and decision support tools into a federate suite. Complete effort to build a highly configurable, agile Distribution Process Nodal Model capable of expressing and analyzing complex and detailed distribution processes at nodes. Continue process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions. Continued M&S innovation. Continue to leverage existing collaboration & situational awareness technologies to provide dynamic planning and course of action development/execution capabilities. Commence Joint Flow Analysis System for Transportation (JFAST) modernization to provide full-spectrum transportation adaptive planning and analysis in a collaborative, web-accessible, service oriented environment. Continue partnership with Lincoln Labs for information technology system integration and prototype development.			
Accomplishments/Planned Programs Subtotals	4.400	4.104	-

FY 2011

FY 2012

FY 2013

	ONOE/ (OOII IED		
Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logis	stics Agency		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 5: Distribut	ion Planning and Forecasting
C. Other Program Funding Summary (\$ in Millions)		1	
N/A			
D. Acquisition Strategy N/A			
E. Performance Metrics	entimizing the distribution process. Dive feets on a	raceerab and	dovolopment to address werfinkting
Planning based on an understanding of customer requirements for requirements.	opumizing the distribution process. Plus locus on t	esearch and (development to address warnighting

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic									DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)			R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology PROJECT 6: Joint Transportation Interface			nterface					
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
6: Joint Transportation Interface	8.022	6.895	-	-	-	-	-	-	_	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

Synchronizing strategic/theater delivery capabilities to meet increasingly dynamic customer needs. Transportation information exchange across the DOD is inhibited by the disparity of systems, differing data standards, and insufficient interfaces. Queries and retrieval of status and shipment information cannot be executed due to lack of connectivity between the various components of the supply chain. The ability to maintain situational awareness of movements at macro/micro (drill down) levels, with associated force and sustainment cargo on board; to track force packages progress, and rapidly determine the impact of any delays or changes to sailing progress and arrival at port of debarkation; and to conduct "what -if" impact assessment of possible changes to delivery asset's course, speed or departure/arrival information as it relates to force or force package delivery/impact of any change on the closure of force packages in theater is required. The ability of USTRANSCOM to supply transportation support for homeland defense and/or disaster relief depends on effective ways to link with other governmental and civilian agencies. Also need to explore the many barriers across the Joint Deployment and Distribution Enterprise (JDDE), to include non-DOD government entities, coalition partners, non-government organizations, and commercial industry, which can create confusion/conflict or detract from the optimization of the JDDE.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Joint Transportation Interface	8.022	6.895	-
FY 2011 Accomplishments: Completed Coalition Mobility System (CMS) JCTD transition efforts. Completed multi-year development of an automated data quality analysis capability linked to the Enterprise Data Warehouse (EDW) that will enable end-to-end analysis of data quality and system performance. Continued development/commence assessment of cognitive-based visualization, alerting and optimization engine effort. Continued demonstration of semantic solutions. Commenced transition of cross domain suite of tools for joint warfighter with text chat language, translation, whiteboard, audio and Extensible Markup Language (XML) guard functionality and commence transition activities. Commenced development of tool that will increase Aerial Refueling asset and aircrew usage efficiency by increasing visibility of requirements, allocations, and asset and aircrew disposition enabling more optimal and synchronized management. Developed data quality and standardization for decision support utilizing semantic technology. Developed cyber security methods. Commenced efforts to translate social networking and crowd sourcing technologies into militarily useful capabilities. Start effort to tests IT systems in a lab environment prior to connecting systems to live networks.			
FY 2012 Plans: Continue development of tool that will increase Aerial Refueling asset and aircrew usage efficiency by increasing visibility of requirements, allocations, assets, and aircrew disposition enabling more optimal and synchronized management. Complete			

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logist	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	6: Joint Transportation Interface
BA 3: Advanced Technology Development (ATD)	Enterprise Technology	

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
development/commence assessment of cognitive-based visualization, alerting and optimization engine effort. Complete semantic technology solution. Continue data quality and standardization for decision support utilizing semantic technology. Continue efforts to translate social networking and crowd sourcing technologies into militarily useful capabilities. Commence capability to make Single Mobility System (SMS) data available via web services vice SMS application. Start effort to integrate basic web mapping capabilities with high end analytic services. Continue effort to tests IT systems in a lab environment prior to connecting systems to live networks.			
Accomplishments/Planned Programs Subtotals	8.022	6.895	-

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

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

	Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency									DATE: Feb	ruary 2012	
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)								PROJECT 7: Distribution Protection/Safety/Security				
	COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
	7: Distribution Protection/Safety/ Security	5.712	9.430	-	-	-	-	-	-	-	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

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

The Theater Commander has not always been able to provide the appropriate security in a timely manner during deployment. In some cases there are insufficient security assets to oversee convoy security in-country; therefore, all movement requirements are competing for the same limited resources. Additionally need to explore new, portable methods of detecting hazardous/asymmetric materials in very small quantities to support safe logistics operations. Also explore technologies to enhance the capability to deliver personnel/materiel to anti-access/austere airfields and seaports.

Title: Distribution Protection/Safety/Security	5.712	9.430	-
FY 2011 Accomplishments: Continued to develop/mature technologies to improve the accuracy and the methods of airdropped supplies and incrementally field military useful technologies. Continued to develop manned/unmanned systems for point of need delivery. Develop a low cost, one time use airdrop system that will provide assistance in the form of food and water directly to populated areas within initial days of a humanitarian disaster. Commenced joint precision airdrop from helicopter sling-load effort. Partnered to develop manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (Autonomous Technologies for Unmanned Air Systems (ATUAS) JCTD and High Speed Container Delivery System (HSCDS) JCTD). Commenced effort to decontaminate aircraft exposed to chemical warfare agents. Commence anti-piracy automated information system to increase visibility/tracking of vessels as sea. Continued investigation of the development of hybrid technologies in support of logistics.			
FY 2012 Plans: Complete joint precision airdrop from helicopter sling-load. Continue improving the accuracy and methods of joint precision airdrop. Continue to develop manned/unmanned systems for point of need delivery. Continue effort to decontaminate exposed to chemical warfare agents. Tests HSCDS JCTD capabilities. Continue to develop a low cost, one time use airdrop system that will provide assistance in the form of food and water directly to populated areas within initial days of a humanitarian disaster. Continue to develop manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (ATUAS) JCTD. Complete anti-piracy automated information system to increase visibility/tracking of vessels as sea.			
Accomplishments/Planned Programs Subtotals	5.712	9.430	-

FY 2011

FY 2012

FY 2013

0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD) PE 0603713S: Deployment and Distribution 7: Distribution Protection/Safet Enterprise Technology	
0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD) C. Other Program Funding Summary (\$ in Millions) N/A D. Acquisition Strategy N/A E. Performance Metrics Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to address	ry 2012
 N/A D. Acquisition Strategy N/A E. Performance Metrics Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to address 	afety/Security
N/A E. Performance Metrics Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to address.	
Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to addre	
	ldress warfighting

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency DATE: February 2012											
APPROPRIATION/BUDGET ACTIV 0400: Research, Development, Test BA 3: Advanced Technology Develo	oment, Test & Evaluation, Defense-Wide PE 0603713S: Deployment and Distribution 8: Command and Control/Optimization/			PE 0603713S: Deployment and Distribution 8: Command and Control/Optimal			on/				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
8: Command and Control/ Optimization/Modeling and Simulation	-	-	16.687	-	16.687	16.742	16.911	17.357	17.652	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

Capabilities which improve deployment, distribution and supply chain decision-making/collaboration (planning stage to real-time execution and retrograde operations) without need for highly specialized operators. Projects in this area address the following: decision support tools, distribution process simulations/analytics, distribution demand forecasting/execution monitoring, training, automated decision-maker support (e.g., queuing, alerting, courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. Current planning, forecasting and collaboration capabilities do not permit full synchronization of people, processes and assets to execute planned operations. Automated tools must be able to dynamically analyze/predict demand and provide input to advanced distribution planning systems. Transportation information exchange across the DOD is inhibited by disparate systems, multiple data standards and insufficient interfaces. The ability to maintain situational awareness of movements at macro/micro (drill down) levels, with associated force and sustainment cargo on board; to track force packages progress, and rapidly determine the impact of any delays or changes to sailing progress and arrival at port of debarkation; and to conduct "what -if" impact assessment of possible changes to delivery asset's course, speed or departure/arrival information as it relates to force or force package delivery/impact of any change on the closure of force packages in theater is required. This project addresses the required mission support to combatant commanders and other customers in the area of C2, Optimization, and Modeling and Simulations.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Command and Control/Optimization/Modeling and Simulation	-	-	16.687
FY 2013 Plans: Continue process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions. Continue development and spiral transition of collaboration & situational awareness technologies to provide dynamic planning an course of action development/execution capabilities. Commence Joint Flow Analysis System for Transportation (JFAST) modernization to provide full-spectrum transportation adaptive planning and analysis in a collaborative, web-accessible, service oriented environment. Continue partnership with Lincoln Labs for information technology system integration and prototype development. Continue capability to make Single Mobility System (SMS) data available via web services vice SMS application. Continue effort to integrate basic web mapping capabilities with high end analytic services. Continue efforts to translate social networking and crowd sourcing technologies into militarily useful	t		

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistic	DATE: February 2012	
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT
0400: Research, Development, Test & Evaluation, Defense-Wide	PE 0603713S: Deployment and Distribution	8: Command and Control/Optimization/
BA 3: Advanced Technology Development (ATD)	Enterprise Technology	Modeling and Simulation

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
capabilities. Continue to develop a planner's capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency.			
Accomplishments/Planned Programs Subtotals	-	-	16.687

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency DATE: February 2012											
APPROPRIATION/BUDGET ACTIV	R-1 ITEM N	R-1 ITEM NOMENCLATURE P									
0400: Research, Development, Test	& Evaluatio	n, Defense-l	Vide	PE 0603713	3S: Deploym	ent and Dist	ribution	9: Cyber			
BA 3: Advanced Technology Develo	pment (ATD)		Enterprise 7	Technology						
COST (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To	
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost
9: Cyber	-	_	1.821	_	1.821	1.826	1.845	1.894	1.926	Continuing	Continuing

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

USTRANSCOM requires mission assurance in a persuasive/dynamic cyber environment. Projects in this area address the following: procedures/technologies which improve cyber surveillance and control of networks across multiple domains; ability to continue critical network operations in contested unclassified and classified network environments; ability to differentiate between valid and unauthorized users; determine and quantify the trustworthiness of hardware/software systems; rapidly analyze & correlate data regarding malicious activities; select/evoke real-time defense actuators; automated reasoning capabilities that address data quality issues that are currently manual, difficult, and time consuming to resolve; and ability to rapidly return to a known/safe operating state.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Cyber	-	-	1.821
FY 2013 Plans:			
Continue Lincoln Labs partnership to explore cyber security enhancements.			
Accomplishments/Planned Programs Subtotals	-	-	1.821

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

N/A

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logistics Agency DATE: February 2012													
APPROPRIATION/BUDGET ACTIVITY					R-1 ITEM NOMENCLATURE PRO-					PROJECT			
0400: Research, Development, Test	ch, Development, Test & Evaluation, Defense-Wide PE 0603713S: Deployment and Distribution 10: Global Access			PE 0603713S: Deployment and Distribution 10: Global Access									
BA 3: Advanced Technology Develo	pment (ATD))		Enterprise 1	Technology								
COST (¢ in Milliana)			FY 2013	FY 2013	FY 2013					Cost To			
COST (\$ in Millions)	FY 2011	FY 2012	Base	oco	Total	FY 2014	FY 2015	FY 2016	FY 2017	Complete	Total Cost		
10: Global Access	-	-	9.103	-	9.103	9.141	9.251	9.541	9.678	Continuing	Continuing		

Note

Projects 1-3, 5-7 repackaged into new Projects 8-10 starting in FY13 per ASD (R&E) recommendation.

A. Mission Description and Budget Item Justification

DOD requires procedures/technologies targeted at optimizing throughput at the nodes and through the conduits of the deployment and distribution supply chains, from origin to point of use and return to include: inventory/cargo management; materiel handling innovations; improved physical node access (includes aircraft all-weather visual systems); port throughput enhancements; innovative delivery methods (e.g., precision airlift, autonomous re-supply); and cargo/container security. This project addresses required mission support to combatant commanders and other customers of DOD's distribution and transportation systems in the area of deployment/ distribution velocity management, manned/unmanned systems to the point of effect, and increased global reach in austere/anti-access environments.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2011	FY 2012	FY 2013
Title: Global Access	-	-	9.103
FY 2013 Plans: Complete current efforts improving the accuracy and methods of joint precision airdrop. Complete effort to investigate effects of chemical agents on aircraft materials and structures. Complete/transition High Speed Container Delivery System (HSCDS) capabilities. Complete development of manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (Autonomous Technologies for Unmanned Air Systems (ATUAS)) JCTD. Complete ship-to-shore causeways linkage system to support deployment/sustainment of the warfighter in austere locations and joint logistics over the shore. USTRANSCOM supports development of airship/hybrid airship viability through studies and limited technical or operational demonstrations.			
Accomplishments/Planned Programs Subtotals	-	-	9.103

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

N/A

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2013 Defense Logi	istics Agency	DATE: February 2012			
APPROPRIATION/BUDGET ACTIVITY 0400: Research, Development, Test & Evaluation, Defense-Wide BA 3: Advanced Technology Development (ATD)	R-1 ITEM NOMENCLATURE PE 0603713S: Deployment and Distribution Enterprise Technology	PROJECT 10: Global Access			
E. Performance Metrics Project performance metrics are specific to each effort and include against schedules and deliverables stated in the proposals and state sustainment velocity and enhance effectiveness and efficiency of D	measures identified in the metric project plans. Protements of work. >80% transition rate of proven ted				
Sustainment velocity and emiance effectiveness and efficiency of D	ob logistics/supply chain operations.				

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