Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Defense Logistics Agency											DATE: April 2013	
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*							
COST ($ in Millions)	**All Prior Years**	**FY 2012**	**FY 2013#**	**FY 2014 Base**	**FY 2014 OCO ##**	**FY 2014 Total**	**FY 2015**	**FY 2016**	**FY 2017**	**FY 2018**	**Cost To Complete**	**Total Cost**
Total Program Element	28.761	29.710	30.678	30.256	-	30.256	29.602	29.959	30.461	30.762	Continuing	Continuing
1: *Capabilities Based Logistics*	4.268	3.074	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
2: *Deployment and Distribution Velocity Management*	3.599	3.270	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
3: *Cross Domain Intuitive Planning*	1.106	1.302	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
4: *End-to-End Visibility*	1.654	1.642	2.903	0.751	-	0.751	3.090	0.000	0.000	0.000	Continuing	Continuing
5: *Distribution Planning and Forecasting*	4.400	4.104	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
6: *Joint Transportation Interface*	8.022	6.895	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
7: *Distribution Protection/Safety/ Security*	5.712	9.423	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
8: *Command and Control/ Optimization/Modeling and Simulation*	0.000	0.000	16.625	17.977	-	17.977	15.416	18.459	18.617	18.796	Continuing	Continuing
9: *Cyber*	0.000	0.000	1.821	2.946	-	2.946	1.845	2.997	3.182	3.214	Continuing	Continuing
10: *Global Access*	0.000	0.000	9.329	8.582	-	8.582	9.251	8.503	8.662	8.752	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 is tasked to provide globally integrated, agile deployment and distribution solutions and related enabling capabilities to support national security, force readiness and sustainability within an increasingly constrained defense budget. Unpredictable and extended global distribution routes, limited visibility of sustainment requirements, force packaging limitations, lift constraints, anti-access/aerial denial concerns, complex supply chains, as well as non-networked battlefield command and control, planning, and decision support tools impede timely customer logistical support. To project unimpeded global power and influence, USTRANSCOM must have access to relevant, real-time information and invest in enabling capabilities that contribute to mission success. Effective knowledge sharing and transparency

Exhibit R-2, RDT&E Budget Item Justification: PB 2014 Defense Logistics Agency	DATE: April 2013
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*

across the joint logistics enterprise, facilitated by secure enterprise-wide visibility into logistical processes and the ability to effectively collaborate/operate in a degraded cyberspace, is required to promote effective, efficient and responsive global management of force projection and sustainment resources.

B. Program Change Summary ($ in Millions)	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total
Previous President's Budget	29.899	30.678	30.763	-	30.763
Current President's Budget	29.710	30.678	30.256	-	30.256
Total Adjustments	-0.189	0.000	-0.507	-	-0.507
• Congressional General Reductions	-0.189	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• FY2014 Departmental Fiscal Guidance	-	-	-0.507	-	-0.507

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

FY2014 Secretary of Defense Initiatives: -$0.507 million

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
1: *Capabilities Based Logistics*	4.268	3.074	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014
Title: Capabilities Based Logistics	3.074	0.000	0.000
FY 2012 Accomplishments: 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	3.074	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 DOD supply chain performance. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
2: *Deployment and Distribution Velocity Management*	3.599	3.270	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 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 2012	FY 2013	FY 2014
Title: Deployment and Distribution Velocity Management	3.270	0.000	0.000
FY 2012 Accomplishments: 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	3.270	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Increase force projection and sustainment velocity. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
3: *Cross Domain Intuitive Planning*	1.106	1.302	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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, on-line training, automated decision-maker support (e.g., queuing, alerting, recommended courses of action), automated status monitoring with information fusion and drilldown capability, and resilient C2 infrastructure capabilities. This project will provide required mission support to combatant commanders and other distribution/ transportation customers in the area of collaborative planning/execution/information sharing/decision support tools.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Cross Domain Intuitive Planning	1.302	0.000	0.000
FY 2012 Accomplishments: 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	1.302	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 and focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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 4: *End-to-End Visibility*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
4: *End-to-End Visibility*	1.654	1.642	2.903	0.751	-	0.751	3.090	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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

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 over-arching 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.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: End-to-End Visibility	1.642	2.903	0.751
FY 2012 Accomplishments: Continued effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Began JCTD to continue development and provide a mobile AIT capability in a military environment and austere locations. Started JCTD to expand on gains made in FY11 on gaining visibility of non-DOD goods during disaster/ humanitarian relief operations. Started effort to integrate basic web mapping capabilities with high end analytical mapping services to properly authenticated users.			
FY 2013 Plans: Contiune 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. Continue to integrate basic web mapping capabilities with high end analytical mapping services to properly authenticated users.			
FY 2014 Plans:			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 4: *End-to-End Visibility*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Complete final development and demonstration activities associated with JCTD. Complete effort to provide capability to read RFID tags from standoff distances thus increasing theater visibility coverage without increasing infrastructure. Complete integration of basic web mapping capabilities with high end analytical mapping services to properly authenticated users.			
Accomplishments/Planned Programs Subtotals	1.642	2.903	0.751

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions 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 2014 Defense Logistics Agency			DATE: April 2013
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: *Distribution Planning and Forecasting*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
5: *Distribution Planning and Forecasting*	4.400	4.104	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Distribution Planning and Forecasting	4.104	0.000	0.000
FY 2012 Accomplishments: 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	4.104	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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: *Distribution Planning and Forecasting*

D. Acquisition Strategy

N/A

E. Performance Metrics

Planning based on an understanding of customer requirements for optimizing the distribution process. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
6: *Joint Transportation Interface*	8.022	6.895	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014
Title: Joint Transportation Interface	6.895	0.000	0.000
FY 2012 Accomplishments: 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 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	6.895	0.000	0.000

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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*

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

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

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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 7: *Distribution Protection/Safety/Security*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
7: *Distribution Protection/Safety/ Security*	5.712	9.423	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Title: Distribution Protection/Safety/Security	9.423	0.000	0.000
FY 2012 Accomplishments: 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	9.423	0.000	0.000

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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E. Performance Metrics

Providing the appropriate security in a timely manner during deployment and distribution operations. Plus focus on research and development to address warfighting requirements.

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency			DATE: April 2013
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 8: *Command and Control/Optimization/ Modeling and Simulation*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
8: *Command and Control/ Optimization/Modeling and Simulation*	0.000	0.000	16.625	17.977	-	17.977	15.416	18.459	18.617	18.796	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014
Title: Command and Control/Optimization/Modeling and Simulation	0.000	16.625	17.977
FY 2013 Plans: Commence JCTD that will further develop capability to move vehicles and equipment in cargo holds of ships at sea without the need for MHE or running vehicles. Continue process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions (previously project 5). Continue development and spiral transition of collaboration & situational awareness technologies to provide dynamic planning and course of action development/execution capabilities (previously project 6). Continue partnership with Air Force Institute of Technology to develop Modeling and Simulation Decision Support technologies (previously project 5). Continue partnership with Lincoln Labs for information technology system integration and prototype development (previously project 2).			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 8: *Command and Control/Optimization/ Modeling and Simulation*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
Continue to develop a planner's capability to fine-tune the pairing of air movement requirements and resources to maximize aircraft utilization efficiency (previously project 6). Continue effort to optimized surface transportation solutions satisfying customer requirements in a "capabilities-based" application environment (previously project 2). Continue effort to integrate research in planning, environment monitoring, explanation, goal generation, and goal management to reason about what goals to pursue in response to unexpected events in DoD Terminal Operations (previously project 2). Continue effort to integrate basic web mapping capabilities with high end analytic services (previously project 6). Continue application of semantic technologies within the JDDE for data validation and correction (previously project 2). Complete modeling tool to enhance optimization of scheduling and movement of forces and sustainment from origins through Ports of Embarkation, en route locations, Ports of Debarkation, and theater distribution nodes to ultimate destinations in support of COCOM Plans (previously project 5). Complete effort that permits MSC assets to provide data to multinational and multi-service forces protecting global commerce (previously project 7). ***FY 2014 Plans:*** Begin effort to increase shared awareness, operational agility and optimize the use of the active duty air refueling (AR) fleet, during the short notice planning process, from a worldwide/fleet-wide perspective, as well as providing the ability to plan, if desired, using allied/coalition/international AR aircraft to refuel DoD aircraft. Start development of an automated method by which to coordinate emerging operational requirements as they are made available and an indexed repository of operational requirements linked to intelligence assessments to facilitate the planning process and provide better up-to-date data and analysis to support COA development. Begin to create robust modeling solutions in the face of uncertainty, provide the capability to model detailed enhanced business rules without major "surgery" or software development, and provide the ability to utilize sub-network modeling to streamline the modeling and analysis process. Continue development and spiral transition of collaboration & situational awareness technologies to provide dynamic planning and course of action development/execution capabilities. Continue partnership with Air Force Institute of Technology to develop Modeling and Simulation Decision Support technologies. Continue partnership with Lincoln Labs for information technology system integration and prototype development. Continue effort to integrate basic web mapping capabilities with high end analytic services. Continue application of semantic technologies within the JDDE for data validation and correction Complete effort to optimized surface transportation solutions satisfying customer requirements in a "capabilities-based" application environment. Complete effort to integrate research in planning, environment monitoring, explanation, goal generation, and goal management to reason about what goals to pursue in response to unexpected events in DoD Terminal Operations. Complete process to determine parts failure/usage patterns and mission type/environment to initiate sustainment support actions.			
Accomplishments/Planned Programs Subtotals	0.000	16.625	17.977

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 8: *Command and Control/Optimization/ Modeling and Simulation*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2012	FY 2013	FY 2014 Base	FY 2014 OCO	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
• PE 0603264S: *Agile Transportation for the 21st Century (AT21)*		0.553	2.309		2.309	0.348				Continuing	Continuing

Remarks

Efforts (Global Mission Scheduling and Dynamic Replanning Nodal Model) shifting from PE 0603713S to PE 0603264S starting in FY13 to support AT21 development.

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 2014 Defense Logistics Agency			DATE: April 2013
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 9: *Cyber*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
9: *Cyber*	0.000	0.000	1.821	2.946	-	2.946	1.845	2.997	3.182	3.214	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014
Title: Cyber	0.000	1.821	2.946
FY 2013 Plans: Continue Lincoln Labs partnership to explore cyber security enhancements (previously project 2).			
FY 2014 Plans: Commence technology development as recommended by Lincoln Labs exploration of security enhancements. Start to develop and deliver a set of services that will enable USTRANSCOM to recognize disruptive events or potential disruptive events, understand their impact, determine a response, and choose and implement the response that best balances addressing the cyber threat while minimizing mission impact.			
Accomplishments/Planned Programs Subtotals	0.000	1.821	2.946

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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 9: *Cyber*

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 2014 Defense Logistics Agency			DATE: April 2013
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*	

COST ($ in Millions)	All Prior Years	FY 2012	FY 2013#	FY 2014 Base	FY 2014 OCO ##	FY 2014 Total	FY 2015	FY 2016	FY 2017	FY 2018	Cost To Complete	Total Cost
10: *Global Access*	0.000	0.000	9.329	8.582	-	8.582	9.251	8.503	8.662	8.752	Continuing	Continuing

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

The FY 2014 OCO Request will be submitted at a later date

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 2012	FY 2013	FY 2014
Title: Global Access	0.000	9.329	8.582
FY 2013 Plans: Continue current efforts improving the accuracy and methods of joint precision airdrop (previously project 7). Continue developing capability to safely air drop supplies directly on populated areas (previously project 7). Continue development of manned and unmanned technologies that delivery cargo/logistics/sustainment to the point of need (Autonomous Technologies for Unmanned Air Systems (ATUAS)) JCTD (previously project 7). Complete development effort for transferring 20 foot containers at sea (previously project 7). Continue effort to investigate effects of chemical agents on aircraft materials and structures. Complete/transition High Speed Container Delivery System (HSCDS) capabilities (previously project 7). Complete ship-to-shore causeways linkage system to support deployment/sustainment of the warfighter in austere locations and joint logistics over the shore (previously project 7). Access airship/hybrid airship viability through studies and limited technical or operational demonstrations (previously project 7).			
FY 2014 Plans: Commence effort to develop a motion compensation platform for loading/off-loading commercial container ships at sea. Commence effort to provide a 500-2,000 pound High Altitude Low Opening (HALO) Container Delivery System (CDS). Improve capability in the flow of military unit equipment and cargo through ocean ports or austere access sites when Joint Logistics-Over-the-Shore (JLOTS) and/or Seabasing operations are established. Start development of a stand-alone ground erected system to support the Thermal Decontamination Containment System and then enclose it and the aircraft in a modified commerical off-the-			

Exhibit R-2A, RDT&E Project Justification: PB 2014 Defense Logistics Agency		DATE: April 2013
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*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2012	FY 2013	FY 2014
shelf deployable aircraft shelter to protect the system from the elements. Begin work on a series of technologies that improve the accuracy of precision airdrop, and which can be adapted as appropriate to any of the various systems that DoD agencies are using. Access airship/hybrid airship viability through studies and limited technical or operational demonstrations. 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 effort to investigate effects of chemical agents on aircraft materials and structures. Complete developing capability to safely air drop supplies directly on populated areas.			
Accomplishments/Planned Programs Subtotals	0.000	9.329	8.582

C. Other Program Funding Summary ($ in Millions)

N/A

Remarks

D. Acquisition Strategy

N/A

E. Performance Metrics

Project performance metrics are specific to each effort and include measures identified in the metric project plans. Project completions 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.