

UNCLASSIFIED
Fiscal Year (FY) 2008/2009 Budget Estimates

				Exhibit R-2, RDT&E Budget Item Justification				Date: February 2007																				
Appropriation/Budget Activity RDT&E, Defense-wide BA: 3				R-1 Item Nomenclature: Program Title: Deployment and Distribution Enterprise Technology Program Element: PE0603713S																								
Cost (\$ in millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013																				
Total PE Cost	9.857	15.158	0	0	0	0	0	0																				
Project 1: Capabilities Based Logistics	1.515	3.024	0	0	0	0	0	0																				
Project 2: Deployment and Distribution Velocity Management	3.492	6.706	0	0	0	0	0	0																				
Project 3: Cross Domain Intuitive Planning	4.850	5.428	0	0	0	0	0	0																				
Project 4: End-to-End Visibility	0	0	0	0	0	0	0	0																				
Project 5: Distribution Planning and Forecasting	0	0	0	0	0	0	0	0																				
Project 6: Joint Transportation Interface	0	0	0	0	0	0	0	0																				
Project 7: Distribution Protection/Safety/Security	0	0	0	0	0	0	0	0																				
<p>A. Mission Description and Budget Item Justification: Global War On Terrorism (GWOT) lessons learned and daily operations indicate that current distribution and logistics processes remain outdated and are rarely capable of providing required warfighter support in an agile, efficient and economical manner.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, 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 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.</p> <p>B. Program Change Summary:</p> <table border="0"> <thead> <tr> <th></th> <th align="center"><u>FY 06</u></th> <th align="center"><u>FY 07</u></th> <th align="center"><u>FY 08</u></th> <th align="center"><u>FY 09</u></th> </tr> </thead> <tbody> <tr> <td>Previous PB07</td> <td align="right">9.857</td> <td align="right">15.215</td> <td align="right">0</td> <td align="right">0</td> </tr> <tr> <td>Current FY08 BES</td> <td align="right">9.857</td> <td align="right">15.158</td> <td align="right">0</td> <td align="right">0</td> </tr> <tr> <td>Total Adjustments</td> <td align="right">0.000</td> <td align="right">-0.057</td> <td align="right">0</td> <td align="right">0</td> </tr> </tbody> </table> <p>Change Summary Explanation: FY07 OSD withhold.</p>										<u>FY 06</u>	<u>FY 07</u>	<u>FY 08</u>	<u>FY 09</u>	Previous PB07	9.857	15.215	0	0	Current FY08 BES	9.857	15.158	0	0	Total Adjustments	0.000	-0.057	0	0
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Cost (\$ in millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Total PE Cost	9.857	15.158	0	0	0	0	0	0
Project 1: Capabilities Based Logistics	1.515	3.024	0	0	0	0	0	0
Project 2: Deployment and Distribution Velocity Management	3.522	6.706	0	0	0	0	0	0
Project 3: Cross Domain Intuitive Planning	4.820	5.428	0	0	0	0	0	0
Project 4: End-to-End Visibility	0	0	0	0	0	0	0	0
Project 5: Distribution Planning and Forecasting	0	0	0	0	0	0	0	0
Project 6: Joint Transportation Interface	0	0	0	0	0	0	0	0
Project 7: Distribution Protection/Safety/Security	0	0	0	0	0	0	0	0
<p>C. Other Program Funding Summary: Displayed on R-2a.</p> <p>D. Acquisition Strategy: N/A for budget activity 3.</p> <p>E. Performance Metrics/Major Performers: Displayed on R-2a.</p>								

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Exhibit R-2a, RDT&E Project Justification							Date: February 2007	
Appropriation/Budget Activity RDT&E, Defense-wide BA: 3				Project Name and Number – Capabilities Based Logistics, Project 1				
Cost (\$ in millions)	FY 06	FY 07	FY 08	FY 09	FY 10	FY 11	FY 12	FY 13
Project 1: Capabilities Based Logistics	1.515	3.024	0	0	0	0	0	0
RDT&E Articles Quantity - N/A								
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, 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 Program:								
	FY 06	FY 07	FY 08	FY 09				
Accomplishment/ Effort/Subtotal Cost	1.515	3.024	0	0				
RDT&E Articles Quantity – N/A								
FY 06 Accomplishments: Node Management and Deployable Depot (NoMaDD) Advanced Concept Technology Demonstration (ACTD). Developed and demonstrated initial spirals of Node Management tools to monitor strategic-to-tactical movement of Class I supplies (food) and containers. Define requirements and initiate development of capabilities for other classes of supply and retrograde. An initial Limited User Evaluation was conducted for Node Management in Apr-May 06.								
FY 07 Plans: Continue spiral development and demonstration of Node Management capabilities to include tools for distribution pipeline management, fuels distribution, and joint asset visibility. Support transition activities of approved spirals into BCS3.								
C. Other Program Funding Summary: USTRANSCOM's funds support Program Management Office (PMO) Battle Command Sustainment Support System (BCS3) and Tapestry Solutions. Funds modified existing Tapestry Solutions contract, with other expenses paid from OSD and Defense Logistics Agency (DLA) sources. Funds also support DLA's NoMaDD ACTD program under PE # 0603712S. Also providing \$0.5M to Defense Distribution Center (DDC) for demonstration of NoMaDD capabilities in Bright Star.								
D. Acquisition Strategy: N/A								
E. Major Performers:								
<u>Contractors:</u>	<u>Location:</u>	<u>Description of Work</u>			<u>FY07 Award Date/\$:</u>			
Tapestry Solutions	San Diego, CA	Software Development (NoMaDD/BCS3)			Nov 06/\$1.985M			
Stanley/LMI	Alexandria, VA	RDT&E program support			Oct 06/\$0.416M			
MITRE	Ft Monmouth, NJ	RDT&E program support			Oct 06/\$0.500M			

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Exhibit R-2a, RDT&E Project Justification					Date: February 2007			
Appropriation/Budget Activity RDT&E, Defense-wide BA: 3					Project Name and Number – Deployment and Distribution Velocity Management, Project 2			
Cost (\$ in millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 2: Deployment and Distribution Velocity Management	3.522	6.706	0	0	0	0	0	0
RDT&E Articles Quantity - N/A								
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 Program:								
	FY 2006	FY 2007	FY 2008	FY 2009				
Accomplishment/ Effort/Subtotal Cost	3.522	6.706	0	0				
RDT&E Articles Quantity – N/A								
FY 06 Accomplishments:								
<ul style="list-style-type: none"> - Analyze joint multi-modal/service compatible platforms that permit the efficient, seamless and continuously visible movement of supplies through the distribution system addressing intermodal exchange and battlefield distribution issues - Engineering and programmatic planning for development of a unique, FedEx-like Transportation Tracking Number (TTN) to increase assurance of planned vs. actual tracking of unit movements required by Combatant Commanders in the Joint Operational Planning and Execution System (JOPES) - Assess feasibility of using specialized cargo platforms for transporting military unit equipment on conventional container ships - Develop a system capable of selectively retrieving/discharging cargo at sea from container ships 								
FY 07 Plans:								
<ul style="list-style-type: none"> - Conduct of Joint Modular Intermodal Distribution System (JMIDS) Joint Capabilities Technology Demonstration (JCTD) limited military utility assessment (LMUA) to evaluate intermodal enhancements and increased agility/flexibility in joint distribution system - Building prototype and assessing utility of a unique, FedEx-like Transportation Tracking Number (TTN) to increase assurance of planned-vs.-actual tracking of unit movements required by Combatant Commanders in the Joint Operational Planning and Execution System (JOPES) - Ascertain if specialized containers can be used to transport unit equipment via container ships/provide support comparable to roll on/roll off ships 								

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Project 2: Deployment and Distribution Velocity Management	3.522	6.706	0	0	0	0																																															
RDT&E Articles Quantity - N/A																																																					
<p>- Complete the development and successfully demonstrate a system capable of selectively retrieving fully loaded 20FT containers from at sea container ships (in up to sea state 5) for selected onward movement</p> <p>C. Other Program Funding Summary: \$0.498M FY06 and \$2.694M FY07 to Army for the Joint Modular Intermodal Distribution System (JMIDS) Joint Capabilities Technology Demonstration (JCTD) (PEs 0633001/0665805 refer).</p> <p>D. Acquisition Strategy: N/A</p> <p>E. Major Performers:</p> <table border="0" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Contractors:</u></th> <th style="text-align: left;"><u>Location:</u></th> <th style="text-align: left;"><u>Description of Work</u></th> <th style="text-align: left;"><u>FY07 Award Date/\$:</u></th> <th style="text-align: left;"><u>FY08 Estimated Award Date/\$:</u></th> </tr> </thead> <tbody> <tr> <td>ITLT Solutions Inc.</td> <td>Jacksonville, FL</td> <td>Conrail/Beam System Dev</td> <td>Mar 07/\$1.0M</td> <td>Oct 07/\$2.0M</td> </tr> <tr> <td>Benedict Engineering</td> <td>Tallahassee, FL</td> <td>Selective Retrieval Prototype Design, Build and Demo</td> <td>Nov 06/\$1.500M</td> <td></td> </tr> <tr> <td>SAIC</td> <td>Crane, IN</td> <td>JMIDS Support</td> <td>Oct 06/\$2.693M</td> <td></td> </tr> <tr> <td>MITRE Corporation</td> <td>Ft Monmouth, VA</td> <td>Engineering and development of Transportation Tracking Number</td> <td>Nov 06/\$0.240M</td> <td>Oct 07/\$0.240M</td> </tr> <tr> <td>ORNL</td> <td>Oak Ridge, TN</td> <td>Construct vehicle prototype of port opening and sustainment C2 vehicle</td> <td></td> <td>Nov 07/\$0.5M</td> </tr> <tr> <td>To Be Determined</td> <td>TBD</td> <td>Construct prototype and conduct Experimentation/integration for Transportation Tracking Number</td> <td>Mar 07/\$1.172M</td> <td>Oct 07/\$1.475M</td> </tr> <tr> <td>Booz-Allen Hamilton</td> <td>McLean, VA</td> <td>Vessel Off-Load Tech</td> <td></td> <td>Oct 07/\$2M</td> </tr> <tr> <td>TBD</td> <td>TBD</td> <td>Air-skid Prototype Development</td> <td></td> <td>Oct 07/\$2.8M</td> </tr> </tbody> </table>									<u>Contractors:</u>	<u>Location:</u>	<u>Description of Work</u>	<u>FY07 Award Date/\$:</u>	<u>FY08 Estimated Award Date/\$:</u>	ITLT Solutions Inc.	Jacksonville, FL	Conrail/Beam System Dev	Mar 07/\$1.0M	Oct 07/\$2.0M	Benedict Engineering	Tallahassee, FL	Selective Retrieval Prototype Design, Build and Demo	Nov 06/\$1.500M		SAIC	Crane, IN	JMIDS Support	Oct 06/\$2.693M		MITRE Corporation	Ft Monmouth, VA	Engineering and development of Transportation Tracking Number	Nov 06/\$0.240M	Oct 07/\$0.240M	ORNL	Oak Ridge, TN	Construct vehicle prototype of port opening and sustainment C2 vehicle		Nov 07/\$0.5M	To Be Determined	TBD	Construct prototype and conduct Experimentation/integration for Transportation Tracking Number	Mar 07/\$1.172M	Oct 07/\$1.475M	Booz-Allen Hamilton	McLean, VA	Vessel Off-Load Tech		Oct 07/\$2M	TBD	TBD	Air-skid Prototype Development		Oct 07/\$2.8M
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Appropriation/Budget Activity RDT&E, Defense-wide BA: 3				Project Name and Number – Cross Domain Intuitive Planning and Execution, Project 3				
Cost (\$ in millions)	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Project 3: Cross Domain Intuitive Planning and Execution	4.820	5.428	0	0	0	0	0	0
RDT&E Articles Quantity - N/A								
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 Program:								
	FY 06	FY 07	FY 08	FY 09				
Accomplishment/ Effort/Subtotal Cost	4.820	5.428	0	0				
RDT&E Articles Quantity – N/A								
FY 06 Accomplishments:								
<ul style="list-style-type: none"> - Develop a database and query tool which enables international exchange of airlift (military and commercial) and sealift (military and commercial) schedules to support Coalition Task Force operations - Explore scalability of web service technology to globally share command and control and transportation info with all (Joint, Service) users - Expand current modeling capabilities to perform quantitative programmatic analysis of all aspects of distribution end-to-end process - Expand geospatial awareness through the fusing of existing information into a logistics common operating picture 								
FY 07 Plans:								
<ul style="list-style-type: none"> - Modify Global Decision Support System 2 (GDSS 2) and Global Air Transportation Execution System (GATES) to globally share command and control and transportation info with all (Joint, Service) users - Complete development/testing of enhanced capability to model all distribution scenarios/methods within existing programmatic systems - Complete the development/testing of an enhanced geospatial awareness/logistics operating picture within the USTRANSCOM Deployment Distribution Operations Center (DDOC) - Design, development, integration, documentation and testing of the Joint Air Logistics Information System – Next Generation (JALIS NG) prototype and its infrastructures. This includes improvements and upgrades to the Scheduler’s Workbench, enhanced Request Validation Routing capabilities, and optimizing command and control processes related to the requesting, validating, scheduling, and monitoring of worldwide operations support airlift missions - Commence two year effort to develop and incorporate an air refueling module planning/execution capability within the Joint Flow and Analysis System for Transportation (JFAST) 								

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Cost (\$ in millions)	FY 2006	FY2007	FY2008	FY 2009	FY2010	FY2011	FY2012	FY2013
Project 3: Cross Domain Intuitive Planning and Execution	4.820	5.428	0	0	0	0	4.100	4.083
RDT&E Articles Quantity - N/A								

C. Other Program Funding Summary: N/A

D. Acquisition Strategy: N/A

E. Major Performers:

<u>Contractors:</u>	<u>Location:</u>	<u>Description of Work</u>	<u>FY07 Award Date/\$:</u>	<u>FY08 Estimated Award Date/\$:</u>
BBNT Solutions	Cambridge, MA	Developing Inter-theater model and Interface between models	Dec 06/\$0.654M	
Federated Software Group	St. Louis, MO	Develop software to allow for optimizing operations airlift	Dec 06/\$0.688M	
Federated Software Group	St. Louis, MO	Explore scalability of web services and visualization capabilities in the Single Mobility System	Feb 07/\$0.610M	
Federated Software Group	St. Louis, MO	Explore scalability of web services in Global Decision Support System 2	Feb 07/\$0.610M	
Computer Sciences Corporation	Fairview Heights, IL	Explore scalability of web services in Global Air Transportation Execution System (GATES)	Dec 06/\$0.500M	
Booz-Allen Hamilton	McLean, VA	Developing software to allow info exchange between U.S. and Coalition logistic systems		Oct 07/\$1.00M
DPR	Knoxville, TN	Develop JFAST model to include air refueling	Feb 07/\$0.377M	Oct 07/\$0.430M