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Exhibit R-2, RDT&E Budget Item Justification: PB 2015 Defense Information Systems Agency **Date:** March 2014

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0303610K / <i>Teleport Program</i>
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COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
Total Program Element	29.922	5.461	5.147	2.697	-	2.697	2.498	2.367	2.453	2.631	Continuing	Continuing
NS01: <i>Teleport Program</i>	29.922	5.461	5.147	2.697	-	2.697	2.498	2.367	2.453	2.631	Continuing	Continuing

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

Department of Defense (DoD) Teleport system is a satellite communications (SATCOM) gateway that links the deployed warfighter to the Global Information Grid. The DoD Teleport program has fielded system capabilities incrementally using a multi-generational approach with Generation 1 and 2 Full Deployment authorized by DoD Chief Information Officer on February 18, 2011. DoD Teleport Generation 3 consists of three phases; Phases 1 and 2 are in Production and Deployment while Phase 3 is in Engineering and Manufacturing Development. Each DoD Teleport investment increases the warfighter's ability to communicate with a world-wide, net-centric set of information capabilities, which is vital for the DoD to maintain a persistent presence among its adversaries.

Currently, the Teleport system operates as an upgrade of satellite communication capabilities at selected DoD satellite communications gateways. This system provides deployed warfighters with seamless worldwide multi-band SATCOM connectivity to the Defense Information System Network (DISN) Service Delivery Nodes and legacy tactical command, control, communications, computers, and intelligence systems. It also provides centralized integration capabilities, contingency capacity, and common interfaces to access the DISN.

DoD Teleport's goal is to provide secure, seamless, interoperable, and economical upgrades to DoD SATCOM Gateways and meet the growing throughput requirements of the deployed warfighter.

The primary beneficiaries of the DoD Teleport investment are the DoD Combatant Commanders, Military Departments, Defense Agencies, and the warfighter. DoD Teleport Generation 3 is designed to meet the growing demands of the warfighter through the execution of the following phases:

Phase 1: Gateway Advanced Extremely High Frequency [Extended Data Rate] terminals provides tactical users with a 350% bandwidth increase in survivable, antijam communications through all peacetime and combat operations by installing Navy Multiband Terminals (NMT) at select Teleport sites. In addition to enhanced throughput, the NMT maintains compatibility with legacy waveforms and current tactical terminals.

Phase 2: Gateway Wideband Global SATCOM X/Ka-band terminals provides enhanced Wideband Global System (WGS) X/Ka capability to warfighters worldwide by installing terminals from the Modernization of Enterprise Terminal (MET) program at DoD Teleport and other gateway sites. This gateway enhancement allows Teleport to replace end-of-life Defense Satellite Communications System (DSCS) terminals while remaining interoperable with tactical WGS X/Ka-band users. The MET enhancement provides a 300% Ka-band capacity increase and an 1100% X-band capacity increase to current enterprise terminal X/Ka capabilities. Additionally, it enables the DoD Teleport system to maintain operational availability consistent with Generation 2 requirements and reduce the overall life-cycle cost of X/Ka capabilities across the DoD.

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Phase 3: Mobile User Objective System (MUOS) to Legacy Ultra High Frequency (UHF) systems interoperability will provide interoperability between MUOS users and legacy UHF users by installing MUOS-to-Legacy UHF SATCOM Gateway Component (MLGC) suites of equipment at DoD Teleport sites. MUOS is the next generation DoD UHF SATCOM system that will provide the warfighter with modern worldwide mobile communication services, utilizing the Wideband Code Division Multiple Access waveform for use in the military UHF SATCOM band. MLGC suites will provide critical continuity and interoperability as DoD tactical satellite users transition from legacy waveforms and radios to the Joint Tactical Radio System.

B. Program Change Summary (\$ in Millions)	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total
Previous President's Budget	6.050	5.147	5.715	-	5.715
Current President's Budget	5.461	5.147	2.697	-	2.697
Total Adjustments	-0.589	-	-3.018	-	-3.018
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustment	-0.589	-	-3.018	-	-3.018

Change Summary Explanation

The decrease of -\$0.589 in FY 2013 was attributable to reduced investment in the development of engineering research to consolidate the SATCOM gateways

The decrease of -\$3.018 in FY 2015 is due to a planned realignment of funding between RDT&E and Procurement and the reduction of engineering support for the Digital Intermediate Frequency (IF) switching component.

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Exhibit R-2A, RDT&E Project Justification: PB 2015 Defense Information Systems Agency										Date: March 2014		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0303610K / Teleport Program				Project (Number/Name) NS01 / Teleport Program			
COST (\$ in Millions)	Prior Years	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO #	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
NS01: Teleport Program	29.922	5.461	5.147	2.697	-	2.697	2.498	2.367	2.453	2.631	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

The FY 2015 OCO Request will be submitted at a later date.

A. Mission Description and Budget Item Justification

The Teleport program will implement an integrated test approach that will combine the objectives from multiple testing disciplines (e.g., developmental test, operational test, interoperability, and information assurance) throughout the testing lifecycle to support needed system evaluations. The Teleport program executes its own test events to achieve this integrated approach, but will partner with each phase's respective program office generated test activities to leverage the data needed to satisfy Teleport program test objectives. An FY 2015 approach summary for each investment follows:

Generation 1/2 Technology Refresh/Technology Insertion: FY 2015 funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded and refreshed with new components.

Generation 3: FY 2015 funding will be used to execute Pre-Milestone C documentation preparation and acquisition activities for Generation 3 Phase 3.

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

	FY 2013	FY 2014	FY 2015
Title: Teleport Program	5.461	5.147	2.697
FY 2013 Accomplishments: Continued technology refreshment schedule and testing activities required to sustain Generations-1/2 fielded capabilities. Supported development and testbed hardware acquisition for Digital Intermediate Frequency (Digital IF) capability and the Spectral Warrior SATCOM security monitoring for the fielded system. Mobile User Objective System (MUOS) to Defense Information System Network (DISN): Completed efforts to develop initial research, development, test, and evaluation of the MUOS to UHF bridgehead capability. Both MUOS to DISN gateways are completed and operational. MUOS to Defense Switched Network (DSN): Continued efforts to develop, test, and field MUOS to DSN gateway. Supported pre-Milestone C documentation development for Generation 3 Phase 3 and the future Milestone C decision to include schedule updates, and a life cycle cost estimate. MUOS Legacy Gateway Component (MLGC): Supported MLGC Critical Design Review activities and prototype development. MUOS Voice Gateway (MVG) (formerly MUOS to DSN): Supported continued efforts to develop, test, and field MUOS to circuit switched network bridgehead, including the Critical Design Review and prototype development activities.			
FY 2014 Plans: Continue a technology refresh schedule and testing activities required to sustain Generations-1/2 fielded capabilities by implementing Joint Internet Protocol Modem (JIPM), iDirect 2.X, and MUOS to DISN capabilities at select teleport sites. Generation 3 funding will support preparation for the Operational Test Readiness Review (OTRR), operational testing, and operational			

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B. Accomplishments/Planned Programs (\$ in Millions)	FY 2013	FY 2014	FY 2015
<p>validation for both Generation 3 Phase 1 and Phase 2. These events are required for Phase 1 and Phase 2 to enter the Full Deployment Decision (FDD) in FY 2015. Continue developmental testing of digital IF capability to provide flexibility and resiliency to the Teleport/Gateway systems. In addition, will support JIPM second generation development efforts. MUOS MVG (formerly MUOS to DSN) will obtain KDP B and conduct operational test and evaluation. MUOS GDS will be used for KDP B planning and documentation, and testing and certification regimen.</p> <p>The decrease of -\$0.314 from FY 2013 to FY 2014 is due to reduced planning, engineering, and testing required to support Generations 1 and 2 technology refresh and a reduction in milestone preparation activities in support of Generation 3.</p> <p>FY 2015 Plans: Will continue documentation development in support of Generation 3 Phase 3 Milestone C decision scheduled for 2nd quarter of FY 2015. Will continue research and developmental testing of gateway convergence and mesh technologies that will provide further flexibility and resiliency to the DoD Telpor /Gateway systems.</p> <p>The decrease of -\$2.450 from FY 2014 to FY 2015 is due to the planned realignment of funds from RDT&E to Procurement in order to support DoD Teleport tech refresh/insertion efforts and the curtailment of Generation 3 Phase 3 development activities in accordance with the acquisition strategy.</p>			
Accomplishments/Planned Programs Subtotals	5.461	5.147	2.697

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

Line Item	FY 2013	FY 2014	FY 2015 Base	FY 2015 OCO	FY 2015 Total	FY 2016	FY 2017	FY 2018	FY 2019	Cost To Complete	Total Cost
• O&M, DW/ PE0303610K: <i>O&M, DW</i>	25.076	28.370	13.975	-	13.975	13.979	14.121	14.285	14.285	Continuing	Continuing
• Procurement, DW/ PE0303610K: <i>Procurement, DW</i>	52.251	68.075	52.462	-	52.462	33.210	29.104	23.003	23.064	Continuing	Continuing
• Military Construction, DW: <i>PE0303610, MILCON</i>	-	-	9.600	-	9.600	-	-	-	-	Continuing	Continuing

Remarks

D. Acquisition Strategy

The Teleport Program Office (TPO) uses the DoD preferred evolutionary acquisition approach to acquire Commercial off the Shelf (COTS) and modified COTS equipment when possible. The three TPO procuring agencies, Program Manager Defense Communications and Army Transmission Systems, the Space and Naval Warfare Systems Command, and Defense Information Technology Contracting Organization (DITCO) provide direct contracting support. Assistance from other Departments including Army, Navy, and Air Force is acquired via Military Interdepartmental Purchase Request for both organic and contracted support. The TPO

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maximizes the use of performance-based contracts and requires contractors to establish and manage specific earned value data to mitigate risk and monitor deviations from cost, schedule, and performance objectives. Performance is evaluated thorough post-award contract reviews, performance assessment during quarterly program reviews. The MLGC program will use various contract types to employ the vendor best suited to deliver the program’s capabilities to the warfighter.				
E. Performance Metrics				
Tech Refresh and Generation 3 Cost and Schedule Performance Metrics:				
Teleport manages and tracks its cost and schedule performance parameters using a tailored Earned Value Management System (EVMS) process, integrating the program plan, the program schedule, Work Breakdown Structure (WBS), and financial data. Progress is monitored/documented monthly showing percentages complete for schedule and cost. Formal updates with changes to the schedule are documented against the program baseline.				
Tech Refresh and Generation 3 Program Metrics:				
RDT&E funds will be used to maintain an interoperability certification of the fielded DoD Teleport system in light of required/desired system changes. These changes are certified in standalone test events or as part of DoD Interoperability Communications Exercises (DICE). Percentage will be computed by dividing the number of changes under test by the number deemed DoD Interoperable.				
Performance metrics have been established in four measurement areas: 1) customer results, 2) mission and business results, 3) processes and activities, and 4) technology. Specific measurement indicators and units of measure vary by measurement area, and metrics in each of the aforementioned areas are measured annually. Teleport will use the same measurement areas for performance metrics in FY 2013, FY 2014 and FY 2015:				
Generation 1/2 Metric		FY 2013	FY 2014	FY 2015
Percentage of system changes resulting in interoperability certification		100%	100%	100%
Number of G3P1 Operational Test Events		-	1 Planned/1 Required	
Number of G3P2 Operational Test Events		-	1 Planned/1 Required	
Number of completed program events to develop, test, implement, and field and transfer MLGC to TPO		5 Completed/8 Required	7 Planned/8 Required	8
Planned/8 Required				
Number of completed program events to develop, test, implement, and field and transfer MVG to TPO		4 Completed/6 Required	6 Planned/6 Required	5
Planned/6 Required				
Number of completed program events to develop, test, implement, field and transfer MGDS to TPO		5 Completed/6 Required	6 Planned/6 Required	
*Performance Metrics were realigned to isolate each Appropriation.				

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Defense Information Systems Agency **Date:** March 2014

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303610K / <i>Teleport Program</i>	Project (Number/Name) NS01 / <i>Teleport Program</i>
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Product Development (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical & Design Services (GDS)	Various	SSC Atlantic : Various	0.140	0.212	Nov 2012	0.010	Feb 2014	0.539	Nov 2014	-		0.539	0.150	1.051	1.051
Engineering Technical & Design Services (MLGC)	Various	Various Locations : Various	0.400	0.343	Mar 2013	0.010	May 2014	0.356	Nov 2014	-		0.356	0.410	1.519	Continuing
Engineering Services	C/CPFF	STF Ltd. : Fredericksburg, VA	0.297	-		-		-		-		-	-	0.297	0.297
Engineering Services	IA	SPAWAR Atlantic : Charleston, SC	0.075	-		-		-		-		-	-	0.075	0.075
Engineering Technical & Design Services (MVG)	IA	SSC Atlantic: Various : Various	-	0.320	Mar 2013	-		0.244	Nov 2014	-		0.244	-	0.564	0.564
Engineering Technical & Design Services (Digital IF)	IA	CERDEC : TBD	-	0.904	Jan 2013	-		-		-		-	-	0.904	0.904
Subtotal			0.912	1.779		0.020		1.139		-		1.139	0.560	4.410	-

Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Office Support	C/FFP	BAH : McLean, VA	15.059	0.652	Oct 2012	0.600	Feb 2014	0.670	Nov 2014	-		0.670	-	16.981	Continuing
Program Office Support	SS/CPFF	SAIC : Falls Church, VA	0.166	-		-		-		-		-	-	0.166	0.166
Program Office Support	C/CPAF	STF : Fredericksburg, VA	0.157	-		-		-		-		-	-	0.157	0.157
Program Office Support	IA	SPAWAR : Charleston, SC	1.221	-		-		-		-		-	-	1.221	1.221
Contractor Program Office Support	MIPR	SSC Atlantic, STF : Charleston, SC	1.050	-		0.050	Oct 2013	-		-		-	1.100	2.200	2.200
Program Office Support	IA	CERDEC : Various	0.071	-		-		-		-		-	-	0.071	0.710
Engineering Technical & Design Services	IA	PM DCATS : Ft. Belvoir, VA	0.352	-		-		-		-		-	-	0.352	0.352

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2015 Defense Information Systems Agency												Date: March 2014			
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Support (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering Technical Support (Tech Refresh)	IA	SPAWAR : Charleston, SC	0.740	-		-		-		-		-	0.380	1.120	1.500
Engineering Technical Support (Tech Refresh) 2	IA	PM DCATS : Ft. Belvoir, VA	1.432	-		-		-		-		-	-	1.432	1.432
Program Office Support	TBD	PLD : TBD	-	1.356	Mar 2013	1.578	Jan 2014	-		-		-	1.578	4.512	4.512
Program Office Support Engineering	IA	JITC : Ft. HUA, AZ	-	0.371	Dec 2013	-		-		-		-	-	0.371	0.371
Engineering Technical Support (Spectral Warrior)	IA	NRL : NRL	-	0.552	Mar 2013	-		-		-		-	-	0.552	0.552
Engineering Technical Support (NSSEG)	Various	SSC Atlantic : Various	-	0.729	Feb 2013	-		-		-		-	-	0.729	0.729
Subtotal			20.248	3.660		2.228		0.670		-		0.670	3.058	29.864	-
Test and Evaluation (\$ in Millions)				FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Testing Support Services (Gen 3)	MIPR	JITC : Ft. Huachuca	8.598	0.022	Mar 2013	2.699	Dec 2013	0.888		-		0.888	3.358	15.565	15.565
Testing Support Services (Tech Refresh)	MIPR	JITC : Ft. Huachuca	0.164	-		0.200	Jan 2014	-		-		-	0.200	0.564	Continuing
Subtotal			8.762	0.022		2.899		0.888		-		0.888	3.558	16.129	-
			Prior Years	FY 2013		FY 2014		FY 2015 Base		FY 2015 OCO		FY 2015 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			29.922	5.461		5.147		2.697		-		2.697	7.176	50.403	-
Remarks															

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Defense Information Systems Agency **Date:** March 2014

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	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Teleport Program																												
Technology Refresh - Generation Three																												
Generation Three - Phase 2 Milestone C WGS X/Ka																												
Generation Three - Phase 3 Milestone C MUOS - Legacy																												
Generation Three - Phase 3 FDD MUOS - Legacy																												
MUOS to Legacy Gateway Component																												
CDR																												
Phase 1 Testing – Vendor Site																												
Phase 2 Testing – First Article Testing																												
Phase 3 Operational Assessment – Northwest																												
Ms C Decision																												
MUOS to Defense Switched Network																												
SRR																												
PDR																												
CDR																												
Factory Testing																												
KDP B																												
Installation																												
T&E (DT/OT)																												
KDP C																												
IOC																												
Generic Discovery Server																												

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Exhibit R-4, RDT&E Schedule Profile: PB 2015 Defense Information Systems Agency	Date: March 2014
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Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303610K / <i>Teleport Program</i>	Project (Number/Name) NS01 / <i>Teleport Program</i>
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	FY 2013				FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
SRR	■																											
PDR		■																										
CDR			■																									
Factory Testing				■	■																							
KDP B						■																						
Installation						■																						
T&E (DT/OT)						■	■	■																				
KDP C							■	■																				
IOC							■	■	■																			

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Defense Information Systems Agency

Date: March 2014

Appropriation/Budget Activity

0400 / 7

R-1 Program Element (Number/Name)

PE 0303610K / Teleport Program

Project (Number/Name)

NS01 / Teleport Program

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
Teleport Program				
Technology Refresh - Generation Three	2	2013	2	2014
Generation Three - Phase 2 Milestone C WGS X/Ka	2	2013	3	2013
Generation Three - Phase 3 Milestone C MUOS - Legacy	2	2013	4	2013
Generation Three - Phase 3 FDD MUOS - Legacy	4	2014	2	2015
MUOS to Legacy Gateway Component				
CDR	2	2013	2	2013
Phase 1 Testing – Vendor Site	4	2013	4	2013
Phase 2 Testing – First Article Testing	2	2014	2	2014
Phase 3 Operational Assessment – Northwest	3	2014	4	2014
Ms C Decision	4	2014	4	2014
MUOS to Defense Switched Network				
SRR	3	2013	3	2013
PDR	3	2013	3	2013
CDR	2	2013	2	2013
Factory Testing	3	2013	1	2014
KDP B	3	2014	3	2014
Installation	3	2014	3	2014
T&E (DT/OT)	3	2014	4	2014
KDP C	4	2014	4	2014
IOC	3	2014	4	2014
Generic Discovery Server				
SRR	1	2013	1	2013

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Exhibit R-4A, RDT&E Schedule Details: PB 2015 Defense Information Systems Agency	Date: March 2014
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Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
PDR	2	2013	2	2013
CDR	3	2013	3	2013
Factory Testing	4	2013	1	2014
KDP B	1	2014	1	2014
Installation	1	2014	1	2014
T&E (DT/OT)	1	2014	3	2014
KDP C	2	2014	3	2014
IOC	2	2014	4	2014