Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Information Systems Agency

R-1 Program Element (Number/Name)

**Date:** May 2017

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0303610K / Teleport Program

Operational Systems Development

Appropriation/Budget Activity

COST (\$ in Millions)	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
Total Program Element	43.688	1.665	0.657	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
NS01: Teleport Generation 1/2	41.675	0.434	0.657	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
NS02: Teleport Generation 3	2.013	1.231	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing

Program MDAP/MAIS Code: Project MDAP/MAIS Code(s): N81

### 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 SATCOM capabilities at selected DoD SATCOM 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 provide 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

PE 0303610K: *Teleport Program*Defense Information Systems Agency

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Exhibit R-2, RDT&E Budget Item Justification: FY 2018 Defense Information Systems Agency

**Date:** May 2017

## **Appropriation/Budget Activity**

R-1 Program Element (Number/Name)

0400: Research, Development, Test & Evaluation, Defense-Wide I BA 7:

PE 0303610K / Teleport Program

Operational Systems Development

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.

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 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Previous President's Budget	1.736	0.657	0.000	-	0.000
Current President's Budget	1.665	0.657	0.000	-	0.000
Total Adjustments	-0.071	0.000	0.000	-	0.000
<ul> <li>Congressional General Reductions</li> </ul>	-	-			
<ul> <li>Congressional Directed Reductions</li> </ul>	-	-			
<ul> <li>Congressional Rescissions</li> </ul>	-	-			
<ul> <li>Congressional Adds</li> </ul>	-	-			
<ul> <li>Congressional Directed Transfers</li> </ul>	-	-			
<ul> <li>Reprogrammings</li> </ul>	-	-			
SBIR/STTR Transfer	-	-			
Other Adjustments	-0.071	-	0.000	-	0.000

## **Change Summary Explanation**

The decrease of -\$0.657 in FY 2018 is attributed to the funding be moved to a new program element for Teleport.

Exhibit R-2A, RDT&E Project Ju	stification	FY 2018 D	efense Info	rmation Sy	stems Agen	су				Date: May	2017	
Appropriation/Budget Activity 0400 / 7		R-1 Program Element (Number/Name) PE 0303610K / Teleport Program Project (Number/Name) NS01 / Teleport Generation 1/2						,				
COST (\$ in Millions)  Prior Years  FY 2018  FY 2018  Base				FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost
NS01: Teleport Generation 1/2	41.675	0.434	0.657	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

### 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 approach summary for Teleport Gen 1/2 follows:

Generation 1/2 Technology Refresh/Technology Insertion: 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.

B. Accomplishments/Planned Programs (\$ in Millions)	FY 2016	FY 2017	FY 2018
Title: Teleport Program	0.434	0.657	0.000
FY 2016 Accomplishments: Will conduct interoperability testing and evaluations on the DoD Teleport system as Commercial-off-the-shelf components and software are replaced to ensure the system is capable to meet our intended operational environment.			
FY 2017 Plans: Funding will be used to support the Joint Interoperability Certification of the DoD Teleport System.			
The increase of +\$0.223 from FY 2016 to FY 2017 is attributed to an increase in contract labor for interoperability certification testing. The Teleport system supports multiple baseband security enclaves for both defense and civil authorities.			
FY 2018 Plans: The decrease of -\$0.657 from FY 2017 to FY 2018 is attributed to the funding be moved to a new program element for Teleport.			
Accomplishments/Planned Programs Subtotals	0.434	0.657	0.000
		· · · · · · · · · · · · · · · · · · ·	

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

			FY 2018	FY 2018	FY 2018					Cost 10	
<u>Line Item</u>	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
• O&M, DW/	3.140	3.275	3.498	-	3.498	3.828	3.846	3.913	10.986	Continuing	Continuing
DECCCOCCCCC COLL DILL											I

PE0303610K: *O&M, DW* 

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information	mation Systems Agency	<b>Date:</b> May 2017
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (Number/Name)
0400 / 7	PE 0303610K / Teleport Program	NS01 / Teleport Generation 1/2
C. Other Program Funding Summary (\$ in Millions)	040 FV 2040 FV 2040	Coat To

			FY 2018	FY 2018	FY 2018					Cost To	
Line Item	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
<ul> <li>Procurement, DW/</li> </ul>	7.740	20.291	20.927	-	20.927	21.387	21.582	22.012	22.408	Continuing	Continuing

PE0303610K: Procurement, DW

#### 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 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**

Teleport 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.

**Teleport 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 2016, FY 2017 and FY 2018.

Generation 1/2 Metric:

Percentage of system changes resulting in interoperability certification

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Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense	Information Systems Agency	Date: May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303610K / Teleport Program	Project (Number/Name) NS01 / Teleport Generation 1/2
FY 2016 Actual: 100% FY 2017 Target: 100%		

Exhibit R-2A, RDT&E Project Justification: FY 2018 Defense Information Systems Agency									Date: May	2017			
Appropriation/Budget Activity 0400 / 7						· · · · · · · · · · · · · · · · · · ·					Number/Name) eleport Generation 3		
COST (\$ in Millions)  Prior Years  FY 2016  FY 2017  Base				FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	Cost To Complete	Total Cost	
NS02: Teleport Generation 3	2.013	1.231	0.000	0.000	-	0.000	0.000	0.000	0.000	0.000	Continuing	Continuing	
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-			

Project MDAP/MAIS Code: N81

### A. Mission Description and Budget Item Justification

Assemblishments/Disposed Dresgrams (f. in Millions)

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 approach summary for Teleport Generation 3 follows:

Generation 3: 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 2016	FY 2017	FY 2018
Title: Teleport Program	1.231	0.000	0.000
<b>Description:</b> Generation 3: Funding will be used to execute Pre-Milestone C documentation preparation and acquisition activities for Generation 3 Phase 3.			
FY 2016 Accomplishments: Will conduct operational testing and evaluations on the DoD Teleport Generation 3 Phase 3 implementation.			
<b>FY 2017 Plans:</b> N/A			
The decrease of -\$1.231 from FY 2016 to FY 2017 is due to the completion of Generation 3 operational test and evaluation requirements (specifically contract labor and associated lab support).			
<b>FY 2018 Plans:</b> N/A			
Accomplishments/Planned Programs Subtotals	1.231	0.000	0.000

Exhibit R-2A, RDT&E Project Justi	fication: FY	2018 Defens	se Information	n Systems	Agency				Date: Ma	y 2017	
Appropriation/Budget Activity 0400 / 7	dget Activity					nent (Numb leport Progra	Number/Name) eleport Generation 3				
C. Other Program Funding Summa	ary (\$ in Milli	ons)									
		-	FY 2018	FY 2018	FY 2018					<b>Cost To</b>	
Line Item	FY 2016	FY 2017	Base	OCO	<u>Total</u>	FY 2019	FY 2020	FY 2021	FY 2022	Complete	<b>Total Cost</b>
• O&M, DW/	6.962	6.107	6.680	-	6.680	6.898	6.991	7.135	-	Continuing	Continuing
PE0303610K: O&M, DW											
<ul> <li>Procurement, DW/</li> </ul>	25.034	7.706	1.887	-	1.887	0.000	0.000	0.000	-	Continuing	Continuing
PE0303610K: Procurement, DW											
• MILCON, DW/	-	-	-	-	_	-	-	-	-		
PE0303610K: MILCON, DW											

#### Remarks

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#### **E. Performance Metrics**

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.

Generation 3 Program Metrics:

RDT&E funds will be used to perform acquisition testing.

Across appropriations, 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 2015, FY 2016 and FY 2017.

Number of G3P3 Operational Test Events

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Exhibit R-2A, RDT&E Project Justification: FY 2018 D	Defense Information Systems Agency	<b>Date:</b> May 2017
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303610K I Teleport Program	Project (Number/Name) NS02 / Teleport Generation 3
FY 2016: 1 Planned/1 Required		
FY 2017: N/A FY 2018: N/A		
1 1 2010.14//		

Exhibit R-3, RDT&E Project Cost Analysis: FY 2018 Defense Information Systems Agency  Date: May 2017									
Appropriation/Budget Activity	R-1 Program Element (Number/Name)	Project (N	umber/Name)						
0400 / 7	PE 0303610K / Teleport Program	NS02 / Tele	eport Generation 3						

Support (\$ in Million	s)			FY	2016	FY 2	2017	FY 2 Ba	2018 ise		2018 CO	FY 2018 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	0.492	0.700	Oct 2015	-		-		-		-	0.00	1.192	Continuing
Testing Support Services	MIPR	JITC : Fort Huachuca	0.601	0.531	Jan 2016	-		-		-		-	0.00	1.132	1.132
Systems Engineering	MIPR	SSC-A : Charleston, SC	0.920	-		-		-		-		-	-	-	-
		Subtotal	2.013	1.231		-		-		-		-	-	-	-
		[										1			Torget

	Prior Years	FY 2	2016	FY 2	017	FY 2 Ba	FY 2	FY 2018 Total	Cost To	Total Cost	Target Value of Contract
Project Cost Totals	2.013	1.231		0.000		-	-	-	-	-	-

Remarks

Defe	ense	e Info	orma	tion	Sys	tem	s Ag	gen	су													Dat	e: M	ay 2	2017	7				
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 0303610K / Teleport Program														Project (Number/Name) NS02 / Teleport Generation 3											
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Exhibit R-4A, RDT&E Schedule Details: FY 2018 Defense Information System	Date: May 2017	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303610K / Teleport Program	Project (Number/Name) NS02 / Teleport Generation 3
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# Schedule Details

	St	art	Er	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Teleport Generation 3				
Generation Three - Phase 3 FDD MUOS	1	2015	2	2016