Exhibit R-2, **RDT&E Budget Item Justification:** PB 2020 Defense Information Systems Agency											**Date:** March 2019	

Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* I BA 7: *Operational Systems Development*					**R-1 Program Element (Number/Name)** PE 1203610K I *Teleport Program*							

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
Total Program Element	46.010	0.574	0.723	6.158	-	6.158	3.241	1.274	1.287	1.312	Continuing	Continuing
NS01: *Teleport Generation 1/2*	46.010	0.574	0.723	1.158	-	1.158	1.241	1.274	1.287	1.312	Continuing	Continuing
NS03: *SATCOM Gateway*	-	0.000	0.000	5.000	-	5.000	2.000	0.000	0.000	0.000	Continuing	Continuing

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 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.

Exhibit R-2, **RDT&E Budget Item Justification:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*	

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 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**
Previous President's Budget	0.642	2.323	2.308	-	2.308
Current President's Budget	0.574	0.723	6.158	-	6.158
Total Adjustments	-0.068	-1.600	3.850	-	3.850
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.068	-			
• Adjustment	-	-1.600	3.850	-	3.850

Change Summary Explanation

Decrease of -$0.068 in FY 2018 reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

Decrease of -$1.600 in FY 2019 is attributed to a reduction in the number of test events for technology refresh and technology insertions supporting commercial off the shelf (baseband equipment) and software.

Increase of +$3.850 in FY 2020 is due to increase of +$5.000 for testing to field a MUOS terminal provisioning tool and data controller. This is offset by a decrease of -$1.150 for a reduced number of test events for technology refresh and technology insertions supporting commercial off the shelf (baseband equipment) and software.

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Information Systems Agency					**Date:** March 2019						
Appropriation/Budget Activity 0400 *I* 7				**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*				**Project (Number/Name)** NS01 *I Teleport Generation 1/2*			
COST ($ in Millions)	**Prior Years**	**FY 2018**	**FY 2019**	**FY 2020 Base**	**FY 2020 OCO**	**FY 2020 Total**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**	**Cost To Complete**	**Total Cost**
NS01: *Teleport Generation 1/2*	46.010	0.574	0.723	1.158	-	1.158	1.241	1.274	1.287	1.312	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 2018**	**FY 2019**	**FY 2020**
Title: Teleport Program	0.574	0.723	1.158
Description: N/A **FY 2019 Plans:** Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded with new components. **FY 2020 Plans:** Funding will be used to maintain the Joint Interoperability Certification of the DoD Teleport System as the system is upgraded with new components. **FY 2019 to FY 2020 Increase/Decrease Statement:** Increase of +$0.435 from FY 2019 to FY 2020 is attributed to an increased number of test events for MUOS-to-Legacy UHF SATCOM Gateway Component (MLGC) system Allied Support.			
Accomplishments/Planned Programs Subtotals	0.574	0.723	1.158

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• O&M, DW/ PE1203610K: *O&M, DW*	2.573	3.722	2.887	-	2.887	2.884	2.898	2.912	2.924	Continuing	Continuing

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*	**Project (Number/Name)** NS01 **/** *Teleport Generation 1/2*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• Procurement, DW/	14.154	21.112	22.324	-	22.324	27.405	32.564	30.629	31.203	Continuing	Continuing
PE1203610K: *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 through 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 2018, FY 2019 and FY 2020.

Generation 1/2 Metric: Percentage of system changes resulting in interoperability certification

FY 2018 Target: 100% / Actual 100%

Exhibit R-2A, **RDT&E Project Justification:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*	**Project (Number/Name)** NS01 **/** *Teleport Generation 1/2*

 FY 2019 Target: 100%
 FY 2020 Target: 100%

Exhibit R-3, **RDT&E Project Cost Analysis:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400 **/** 7	**R-1 Program Element (Number/Name)** PE 1203610K **/** *Teleport Program*	**Project (Number/Name)** NS01 **/** *Teleport Generation 1/2*

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Technical Support (Tech Refresh)	MIPR	CERDEC : APG	0.000	-		0.200	Oct 2018	1.158	Oct 2019	-		1.158	Continuing	Continuing	Continuing
SATCOM, NATO, DISN, and Tactical Radio Tech Support Svcs	MIPR	ANSER : VARIOUS	-	0.125	Feb 2018	-		-		-		-	0.000	0.125	0.125
Subtotal			0.000	0.125		0.200		1.158		-		1.158	Continuing	Continuing	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Testing Support Services (Tech Refesh)	MIPR	JITC : Ft. Huachuca	46.010	0.449	Feb 2018	0.523	Feb 2019	-		-		-	0.972	47.954	-
Subtotal			46.010	0.449		0.523		-		-		-	0.972	47.954	N/A

			Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			46.010	0.574		0.723		1.158		-		1.158	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Defense Information Systems Agency		Date: March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*	**Project (Number/Name)** NS01 / *Teleport Generation 1/2*

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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																												
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion								███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███	███			

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400 *I* 7	**R-1 Program Element (Number/Name)** PE 1203610K *I Teleport Program*	**Project (Number/Name)** NS01 *I Teleport Generation 1/2*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
Teleport Program				
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion	2	2019	4	2024

Exhibit R-2A, RDT&E Project Justification: PB 2020 Defense Information Systems Agency										Date: March 2019	
Appropriation/Budget Activity 0400 / 7				**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*					**Project (Number/Name)** NS03 / *SATCOM Gateway*		

COST ($ in Millions)	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
NS03: *SATCOM Gateway*	-	0.000	0.000	5.000	-	5.000	2.000	0.000	0.000	0.000	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The SATCOM Gateway is an enterprise system that will adhere to the Joint Information Environment (JIE) architecture, and support all DoD satellite communications requirements, to include Strategic (Presidential, SECDEF, SECSTATE, Chairman Joint Chiefs of Staff, Milestone Decision Authority (MDA)) and Tactical (Combatant Commanders/Services/Agencies (CC/S/A)) users over satellite trunks through the DoD Information Network (DODIN).

B. Accomplishments/Planned Programs ($ in Millions)	FY 2018	FY 2019	FY 2020
Title: SATCOM Gateway	-	-	5.000
FY 2020 Plans: Funding will be used to engineer, develop, test, and evaluate a MUOS terminal planning tool and data controller to support SATCOM operations. ***FY 2019 to FY 2020 Increase/Decrease Statement:*** Increase of +$5.000 from FY 2019 to FY 2020 is attributed to a SATCOM operational requirement to develop and test a MUOS terminal planning tool and data controller.			
Accomplishments/Planned Programs Subtotals	-	-	5.000

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	FY 2021	FY 2022	FY 2023	FY 2024	Cost To Complete	Total Cost
• O&M, DW/ PE1203610K: *O&M, DW*	10.703	6.436	7.651	0.000	7.651	7.999	7.956	7.174	7.220	Continuing	Continuing
• Procurement, DW/ PE1203610K: *Procurement, DW*	22.626	11.405	1.633	0.000	1.633	2.037	5.447	1.771	1.804	Continuing	Continuing

Remarks

D. Acquisition Strategy
N/A

E. Performance Metrics

SATCOM Gateway Metric: Develop MUOS terminal provisioning tool and data controller
FY 2020 Target: 1 Planned

Exhibit R-3, RDT&E Project Cost Analysis: PB 2020 Defense Information Systems Agency														Date: March 2019
Appropriation/Budget Activity 0400 / 7						**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*						**Project (Number/Name)** NS03 / *SATCOM Gateway*		

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2018		FY 2019		FY 2020 Base		FY 2020 OCO		FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
				Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost			
Engineering Technical Support (MUOS tool)	Various	TBD : TBD	-	-		-		5.000	Oct 2019	-		5.000	Continuing	Continuing	-
Subtotal			-	-		-		5.000		-		5.000	Continuing	Continuing	N/A

	Prior Years	FY 2018	FY 2019	FY 2020 Base	FY 2020 OCO	FY 2020 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	-	-	0.000	5.000	-	5.000	Continuing	Continuing	N/A

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2020 Defense Information Systems Agency		Date: March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*	**Project (Number/Name)** NS03 / *SATCOM Gateway*

	FY 2018				FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024			
	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
SATCOM Gateway																												
Engineering, development, testing, and evaluation of a MUOS terminal planning tool and data controller supporting SATCOM operations.										███████████																		

Exhibit R-4A, **RDT&E Schedule Details:** PB 2020 Defense Information Systems Agency		**Date:** March 2019
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 1203610K / *Teleport Program*	**Project (Number/Name)** NS03 / *SATCOM Gateway*

Schedule Details

Events by Sub Project	Start		End	
	Quarter	**Year**	**Quarter**	**Year**
SATCOM Gateway				
Engineering, development, testing, and evaluation of a MUOS terminal planning tool and data controller supporting SATCOM operations.	2	2020	4	2021