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Exhibit R-2, RDT&E Budget Item Justification: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>
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COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
Total Program Element	46.584	0.706	5.542	3.239	-	3.239	1.273	1.286	1.311	1.339	Continuing	Continuing
NS01: <i>Teleport Generation 1/2</i>	46.584	0.706	1.042	1.240	-	1.240	1.273	1.286	1.311	1.339	Continuing	Continuing
NS03: <i>SATCOM Gateway</i>	0.000	0.000	4.500	1.999	-	1.999	0.000	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.

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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 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total
Previous President's Budget	0.723	6.158	3.241	-	3.241
Current President's Budget	0.706	5.542	3.239	-	3.239
Total Adjustments	-0.017	-0.616	-0.002	-	-0.002
• Congressional General Reductions	-	-0.616			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-0.017	-			
• Adjustment	-	-	-0.002	-	-0.002

Change Summary Explanation

The decrease of -\$0.017 in FY 2019 reflects a transfer of funding to Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs.

The decrease of -\$0.616 in FY 2020 reflects a congressional general reduction.

The decrease of -\$0.002 in FY 2021 is attributed to a very small reduction in planned test activity for technology refresh and technology insertions including MLGC Allied Support.

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>				Project (Number/Name) NS01 / <i>Teleport Generation 1/2</i>			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NS01: <i>Teleport Generation 1/2</i>	46.584	0.706	1.042	1.240	-	1.240	1.273	1.286	1.311	1.339	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 2019	FY 2020	FY 2021
Title: Teleport Program	0.706	1.042	1.240
Description: Department of Defense (DoD) Teleport system is a satellite communications (SATCOM) gateway that links the deployed warfighter to the Department of Defense Information Network (DODIN). The Teleport program supports the warfighter with a world-wide, net-centric set of communication and information capabilities.			
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 2021 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 to FY 2021 Increase/Decrease Statement: Increase of +\$0.198 from FY 2020 to FY 2021 is attributed to an increase in research and development activity at the Joint Satellite Communications Engineering Center (JSEC) lab.			
Accomplishments/Planned Programs Subtotals	0.706	1.042	1.240

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Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS01 / <i>Teleport Generation 1/2</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
• O&M, DW/ PE1203610K: <i>O&M, DW</i>	10.449	10.335	11.375	-	11.375	11.505	10.973	11.121	11.294	Continuing	Continuing
• Procurement, DW/ PE1203610K: <i>Procurement, DW</i>	21.112	22.324	26.655	-	26.655	31.814	29.879	30.453	31.092	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 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.

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS01 / <i>Teleport Generation 1/2</i>
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FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
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

<i>Teleport Program</i>	
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion	

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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS01 / <i>Teleport Generation 1/2</i>
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Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>Teleport Program</i>				
Integrated testing that supported Teleport system evaluation and Technology Refresh/ Technology Insertion	2	2019	4	2025

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Exhibit R-2A, RDT&E Project Justification: PB 2021 Defense Information Systems Agency										Date: February 2020		
Appropriation/Budget Activity 0400 / 7					R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>				Project (Number/Name) NS03 / <i>SATCOM Gateway</i>			
COST (\$ in Millions)	Prior Years	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
NS03: <i>SATCOM Gateway</i>	0.000	0.000	4.500	1.999	-	1.999	0.000	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 2019	FY 2020	FY 2021
Title: SATCOM Gateway	0.000	4.500	1.999
Description: The SATCOM Gateway is an enterprise system that adheres to the Joint Information Environment (JIE) architecture in support of SATCOM operations. The SATCOM Gateway system supports the warfighter to include strategic and tactical users by providing DoD satellite communication requirements over satellite trunks through the DoD Information Network (DODIN).			
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 2021 Plans: Funding will be used to build out software research and development for Full Motion Video (FMV).			
FY 2020 to FY 2021 Increase/Decrease Statement: Decrease of -\$2.501 from FY 2020 to FY 2021 is attributed to completion of the development phase and transfer of the requirement into sustainment.			
Accomplishments/Planned Programs Subtotals	0.000	4.500	1.999

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

Line Item	FY 2019	FY 2020	FY 2021 Base	FY 2021 OCO	FY 2021 Total	FY 2022	FY 2023	FY 2024	FY 2025	Cost To Complete	Total Cost
• O&M, DW/ PE1203610K: <i>O&M, DW</i>	6.436	7.651	7.999	-	7.999	7.956	7.174	7.220	7.371	Continuing	Continuing
• Procurement, DW/ PE1203610K: <i>Procurement, DW</i>	11.405	1.633	2.037	-	2.037	5.447	1.771	1.804	1.842	Continuing	Continuing

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Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS03 / <i>SATCOM Gateway</i>
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C. Other Program Funding Summary (\$ in Millions)

<u>Line Item</u>	<u>FY 2019</u>	<u>FY 2020</u>	<u>FY 2021</u> <u>Base</u>	<u>FY 2021</u> <u>OCO</u>	<u>FY 2021</u> <u>Total</u>	<u>FY 2022</u>	<u>FY 2023</u>	<u>FY 2024</u>	<u>FY 2025</u>	<u>Cost To</u> <u>Complete</u>	<u>Total Cost</u>
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Remarks

D. Acquisition Strategy

N/A

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Exhibit R-4, RDT&E Schedule Profile: PB 2021 Defense Information Systems Agency **Date:** February 2020

Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS03 / <i>SATCOM Gateway</i>
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FY 2019				FY 2020				FY 2021				FY 2022				FY 2023				FY 2024				FY 2025			
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.



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Exhibit R-4A, RDT&E Schedule Details: PB 2021 Defense Information Systems Agency		Date: February 2020
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 1203610K / <i>Teleport Program</i>	Project (Number/Name) NS03 / <i>SATCOM Gateway</i>

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	2025