Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Information Systems Agency	Date: February 2018
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide* / BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
Total Program Element	255.636	14.861	15.428	14.769	-	14.769	14.174	15.014	14.819	15.110	Continuing	Continuing
PC01: *Presidential and National Voice Conferencing/*	93.693	2.865	3.195	3.137	-	3.137	3.008	3.123	3.138	3.187	Continuing	Continuing
T82: *DISN Systems Engineering Support*	161.943	11.996	12.233	11.632	-	11.632	11.166	11.891	11.681	11.923	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) is the Department of Defenses (DoD's) consolidated worldwide telecommunications capability that provides secure, end-to-end information transport for DoD operations. It also provides the warfighter and the Combatant Commands (COCOMs) with a robust Command, Control, Communications, Computing, and Intelligence infrastructure to support DoD net-centric missions and business requirements. The Defense Red Switch Network (DRSN) is a DoD Secure Voice, Command and Control Network that is controlled and directed by the Joint Staff and the Office of the Secretary of Defense. It provides multi-level secure, rapid, ad hoc, voice calling and conferencing capability to the President, Secretary of Defense, Services, COCOMs, subordinate organizations (military and civilian) and coalition allies. DRSN also supports the Presidential and National Voice Conferencing (PNVC) (formerly known as National Emergency Action Decision Network (NEADN)) and the Enhanced Pentagon Capability/Survivable Emergency Conferencing Network. These funds support three major efforts:

DISN Systems Engineering Support: This effort includes engineering for Networking capabilities and optical transport capabilities to ensure the essential operations of a robust and secure DISN; refreshing the systems that instrument and automate the operations, administration, maintenance and provisioning functions and creating a single DISN-wide view for network managers and operators.

PNVC: The PVNC provides selected system engineering for continued development and testing of the PNVC equipment for senior leaders. The PNVC system provides a military, satellite-based, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders anywhere in the world as needed. Funding supports the acquisition activities for the PNVC baseband equipment, including critical and essential engineering required to develop new vocoder and cryptographic and audio-summing equipment.

DoD Mobility: The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the COCOMs.

Exhibit R-2, RDT&E Budget Item Justification: PB 2019 Defense Information Systems Agency	Date: February 2018
Appropriation/Budget Activity 0400: *Research, Development, Test & Evaluation, Defense-Wide I* BA 7: *Operational Systems Development*	**R-1 Program Element (Number/Name)** PE 0303126K *I Long-Haul Communications - DCS*

B. Program Change Summary ($ in Millions)	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total
Previous President's Budget	13.994	15.428	15.002	-	15.002
Current President's Budget	14.861	15.428	14.769	-	14.769
Total Adjustments	0.867	0.000	-0.233	-	-0.233
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	0.867	-	-0.233	-	-0.233

Change Summary Explanation

The increase of +$0.867 in FY 2017 is attributed to increase in systems engineering and development for assured identity capability.

The decrease of $-0.233 in FY 2019 in reduced frequency for Cybersecurity/IA changes in PNVC Software, and reduced testing support Software Defined Networking, and fewer DRSN HW/SW Component Enhancements.

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency			Date: February 2018
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / *Long-Haul Communications - DCS*	Project (Number/Name) PC01 / *Presidential and National Voice Conferencing/*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
PC01: *Presidential and National Voice Conferencing/*	93.693	2.865	3.195	3.137	-	3.137	3.008	3.123	3.138	3.187	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The Presidential and National Voice Conferencing (PNVC) (formerly called National Emergency Action Decision Network (NEADN)) provides system engineering, development and testing of the equipment for senior leaders. The PNVC system provides a military satellite-based, world-wide, survivable, secure, and near toll-quality voice conferencing capability for the President, Secretary of Defense, Chairman, Joint Chiefs of Staff, and other senior national/military leaders. By implementing new technology capabilities (e.g. Ethernet-Framing and higher data rate), this project provides improved performance to the survivable voice conferencing capability. This project supports the acquisition activities for the PNVC baseband equipment, including engineering required to develop new vocoder, cryptographic and audio-summing equipment.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
Title: Presidential and National Voice Conferencing (PNVC)	2.865	3.195	3.137
Description: Presidential and National Voice Conferencing (PNVC) Systems Engineering conduct analyses for continuity of NEADN voice conferencing for national/military leaders through PNVC deployment. Program continues engineering, technical analysis, development, and coordination to ensure terminal, baseband, and satellite synchronization for voice conferencing amongst senior leaders.			
FY 2018 Plans: Continue to support PNVC integration and testing and fielding of expanded capability and upgrades at PNVC sites. This includes systems engineering and testing support to the various platforms receiving the capability. Fund Engineering change proposals for software as needed to respond to user feedback. The increase of +$0.330 from FY 2017 to FY 2018 is attributed to increased requirements for engineering support during system testing and changes to software.			
FY 2019 Plans: Continue to support PNVC integration and testing and fielding of expanded capability and upgrades at PNVC sites. This includes systems engineering and testing support to the various platforms receiving the capability. Fund Engineering change proposals for software as needed to respond to user feedback.			
FY 2018 to FY 2019 Increase/Decrease Statement:			

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
The decrease of -$0.058 from FY 2018 to FY 2019 is attributed to the reduction in the number of engineering changes implemented for fielded capabilities.			
Accomplishments/Planned Programs Subtotals	2.865	3.195	3.137

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• Procurement, DW/PE 0303126K: *Procurement, Defense-Wide*	1.119	1.261	1.386	-	1.386	1.515	1.546	1.577	1.578	Continuing	Continuing

Remarks

N/A

D. Acquisition Strategy

The audio equipment development activities are incorporated into the sole source DRSN sustainment contract. For the development of the BIG cryptographic device, NSA will perform an assisted acquisition for DISA using a competitively awarded fixed price contract. Engineering support for PNVC is provided by task orders competitively awarded on existing DoD contracts and Federally Funded Research and Development Contracts (FFRDC) support.

E. Performance Metrics

PNVC project metrics track the development status of program acquisition documents, as required by the component executive. These documents include: Project Execution Plan, Concept of Operations Acquisition Strategy, Capability Production Document, System Engineering Plan and other documents required by the DISA's Component Acquisition Executive. Additionally, for management and system engineering support vendors, monthly reports are critical to tracking overall programmatic and engineering progress and the percent of total deliverables received on time.

For product development activities, effective progress is measured based upon the task order milestones in the form of development reviews and weekly progress meetings. As end items (hardware and software) become available for test, additional measures will be available. Specifically, the percentage of successfully verified requirements out of the number tested and the number of critical trouble reports outstanding longer than six months, will be tracked.

Performance Metrics:

Project Support Deliverables received on time

FY17 (expected result): 100% / (Actual): 100%
FY18 (expected result): 100%

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*

FY19 (expected result): 100%

Product Deliverable Milestones completed on time

FY17 (expected result): 80% / (Actual): 80%
FY18 (expected result): 100%
FY19 (expected result): 100%

Successfully Tested Requirements:

FY17 (expected result): 95% / (Actual): 95%
FY18 (expected result): 95%
FY19 (expected result): 95%

Critical Trouble Reports > 6 months old

FY17 (expected result): ≤ 4 / (Actual): 1
FY18 (expected result): ≤ 4
FY19 (expected result): ≤ 4

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency			Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*	

Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
BIG Development Preparation	MIPR	NSA : Various	36.206	-		-		-		-		-	Continuing	Continuing	-
MSD-III Development	C/T&M	Raytheon : Largo, FL	18.479	-		-		-		-		-	Continuing	Continuing	-
PNVC Baseband Equipment	TBD	Various : Various	9.300	-		-		-		-		-	Continuing	Continuing	-
Systems Engineering	FFRDC	MITRE : McLean, VA	0.423	-		-		-		-		-	Continuing	Continuing	-
PNVC Baseband Airborne variant ECP	C/CPFF	Raytheon : Largo, FL	16.880	-		-		-		-		-	Continuing	Continuing	-
System Engineering	C/CPFF	Booz Allen Hamilton : McLeam, VA	-	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	81.288	-		-		-		-		-	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
PNVC Software enhancements	C/CPFF	Raytheon : Florida	1.200	0.799	Aug 2017	1.900	Dec 2017	0.785	Feb 2019	-		0.785	Continuing	Continuing	-
PNVC Software enhancements	C/CPFF	General Dynamics : NSA	2.500	0.389	Jun 2017	-		0.652	Feb 2019	-		0.652	Continuing	Continuing	-
Systems Engineering	C/CPFF	Booz Allen Hamilton : McLean, VA	3.000	1.015	Mar 2017	0.815	Mar 2018	0.900	Mar 2019	-		0.900	Continuing	Continuing	-
Systems Engineering	FFRDC	Aerospace Corporation : Falls Church, VA	0.800	0.200	Mar 2017	0.250	Oct 2017	0.350	Oct 2018	-		0.350	Continuing	Continuing	-
Systems Engineering	FFRDC	Mitre : McLean, VA	0.800	0.150	Oct 2016	0.180	Oct 2017	0.450	Oct 2018	-		0.450	Continuing	Continuing	-
Test and Evaluation	TBD	605th : TES	0.500	0.040	Oct 2016	0.050	Oct 2017	-		-		-	Continuing	Continuing	-
Test and Evaluation	TBD	Miscel : ---	0.580	0.272	Oct 2016	-		-		-		-	Continuing	Continuing	-
		Subtotal	9.380	2.865		3.195		3.137		-		3.137	Continuing	Continuing	N/A

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Certifcation Testing	MIPR	Various : Various	3.025	-		-		-		-		-	Continuing	Continuing	-
		Subtotal	3.025	-		-		-		-		-	Continuing	Continuing	N/A

	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	93.693	2.865		3.195		3.137		-		3.137	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*

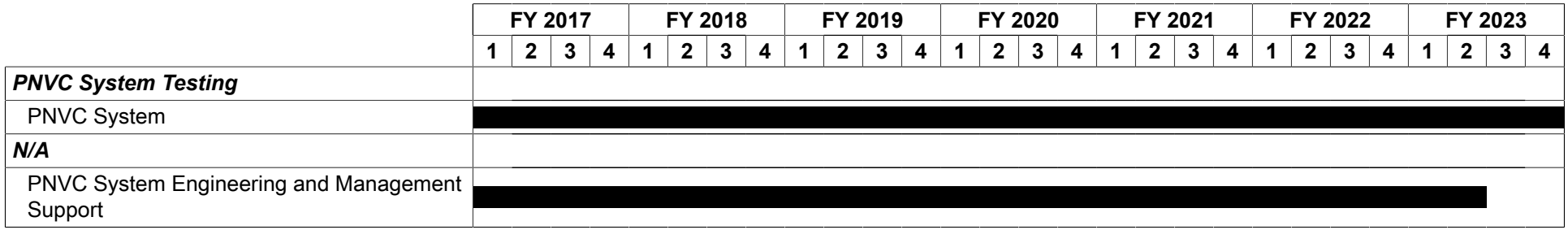

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** PC01 / *Presidential and National Voice Conferencing/*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
PNVC System Testing				
PNVC System	1	2017	4	2023
N/A				
PNVC System Engineering and Management Support	1	2017	2	2023

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency			Date: February 2018
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / *Long-Haul Communications - DCS*	Project (Number/Name) T82 / *DISN Systems Engineering Support*	

COST ($ in Millions)	Prior Years	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
T82: *DISN Systems Engineering Support*	161.943	11.996	12.233	11.632	-	11.632	11.166	11.891	11.681	11.923	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DISN Systems Engineering Support project encompasses four activities:

Next Generation Networking Technologies (formally known as Internet Protocol (IP) and Optical Transport Technology Refresh): Provides engineering technical expertise to support and integrate newer, more efficient technologies required to replace end of lifecycle equipment and to achieve more efficient Networking technologies. These new technologies provide protected and assured services for critical support to the warfighter as well as other DoD and federal customers.

Element Management System (EMS): Provides operational and network operating systems that instrument and automate the operations, administration, maintenance and provisioning functions creating a single DISN-wide view for network managers and operators. EMS is a component of the DISN Operational Support Systems (OSS).

Peripheral and Component Design (Secure Voice Switches): This equipment satisfies unique military requirements for multi-level security (i.e., extensive conferencing/ conference management capabilities and features, and gateway functions) that are not available in commercial products.

DoD Mobility: The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the COCOMs.

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
Title: Next Generation Networking Technologies (formally known as Internet Protocol (IP) and Optical Transport Technology Refresh.	4.236	5.400	5.226
Description: Provides engineering technical expertise to support and integrate newer, more efficient technologies required to replace end of lifecycle equipment and to achieve more efficient Networking technologies. These new technologies provide protected and assured services for critical support to the warfighter as well as other DoD and federal customers.			
FY 2018 Plans: The DISN will continue to perform Research, Test and Evaluation activities in Software Environment, Next Generational Networking to include Gray networks and all associated encryption technologies.			

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
The increase +$1.164 from FY 2017 to FY 2018 will support additional test and evaluation of networking components for efforts such as Automated Provisioning and Software Defined Networking for IP and Optical components. ***FY 2019 Plans:*** The DISN will continue to perform Research, Test and Evaluation activities in Software Environment, Next Generational Networking to include Gray networks and all associated encryption technologies. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** The decrease of -$0.174 is due to a slightly reduced effort on Software Defined networking.			
Title: DISN OSS ***FY 2018 Plans:*** The decrease of -$0.764 from FY 2017 to FY 2018 is due to the reduction in web services development requirements for operational and network operating systems within the DISN OSS. ***FY 2019 Plans:*** N/A ***FY 2018 to FY 2019 Increase/Decrease Statement:*** N/A	0.764	0.000	0.000
Title: Peripheral and Component Design ***Description:*** This equipment satisfies unique military requirements for multi-level security (i.e., extensive conferencing/conference management capabilities and features, and gateway functions) that are not available in commercial products. ***FY 2018 Plans:*** Support upgrades to switch software for IA/Cybersecurity improvements and continued integration of IP trunking and IP line-side and gateway functions in evolving system to meet RMF and NC3 requirements. The decrease of -$0.152 from FY 2017 to FY 2018 reflects a decrease in the amount of software development and testing efforts required in FY 2018. ***FY 2019 Plans:*** Support upgrades to switch software for IA/Cybersecurity improvements and continued integration of IP trunking and IP line-side and gateway functions in evolving system to meet RMF and NC3 requirements. ***FY 2018 to FY 2019 Increase/Decrease Statement:***	2.565	2.413	1.781

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

B. Accomplishments/Planned Programs ($ in Millions)	FY 2017	FY 2018	FY 2019
The decrease of $-0.632 from FY 2018 to FY 2019 is attributed to fewer DRSN HW/SW component enhancements.			
Title: Mobility	4.431	4.420	4.625
Description: DoD Mobility: The Mobility Program will lead the development of an Enterprise Solution to support Controlled Unclassified Information (CUI) and leverage commercial carrier infrastructure to provide entry points for both classified and unclassified wireless capabilities. Continued evolution and expansion, within the Department, of the DoD Mobility program will allow for increased mobile services in direct support of the warfighter and the COCOMs. ***FY 2018 Plans:*** DoD Mobility will continue to evaluate and test the centralized mobility management components for the top secret capabilities as well as newly deployed mobile device hardware, software, middleware that will be integrated into the existing infrastructure. T&E of next generation prototype devices, assured interoperability and application integration for new commercial mobile devices will continue through the FYDP. The decrease of -$0.011 from FY 2017 to FY 2018 is due to decreased testing and integration of the DMCC-S proxy server. ***FY 2019 Plans:*** Developmental and production testing of new-model commercial mobile devices per product baseline, carrier, and platform authenticated against the Mobile Device Manager. Security, interoperability, and functional evaluation of mobile applications. Production testing of the applications development framework and integration testing for infrastructure components, including additional gateway instances supporting secret and top secret domains as well as any COTS component technology refresh requirements against the end-to-end architecture. ***FY 2018 to FY 2019 Increase/Decrease Statement:*** The increase of +$0.205 from FY 2018 to FY 2019 is the result of increases in the mobility communications application development.			
Accomplishments/Planned Programs Subtotals	11.996	12.233	11.632

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost
• O&M/PE0303126K: *Operation & Maintenance, Defense-Wide*	35.685	39.040	37.426	-	37.426	37.522	38.259	-	-	Continuing	Continuing
• Procurement/PE0303126K: *Procurement, Defense-Wide*	99.928	115.194	116.958	-	116.958	117.993	117.993	-	-	Continuing	Continuing

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

C. Other Program Funding Summary ($ in Millions)

Line Item	FY 2017	FY 2018	FY 2019 Base	FY 2019 OCO	FY 2019 Total	FY 2020	FY 2021	FY 2022	FY 2023	Cost To Complete	Total Cost

Remarks

D. Acquisition Strategy

Products acquired for EMS requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA. The DISA Computing Services will be used for hardware and software leased managed services, as well as the NASA enterprise equipment contracting vehicle when necessary and applicable.

The Internet Protocol (IP) enabling of the DRSN DSS-2A switch, Secure voice conference management improvements, HEMP Phone and related DRSN components will use an existing Air Force Command and Control Switching Systems (CCSS) Depot Support contract with the Secure Voice Switch systems manufacturer (Raytheon) to perform the development and modification work, system integration and testing support.

The Mobility initiative supports systems engineering and development of a DoD Mobility solution. The focus is on acquisitions to support the program across the DoD to include scheduling, delivery approach, and risk management. This also includes the vision and phased approach to unified capabilities for classified and unclassified wireless capabilities to meet DoD needs.

Products acquired for EMS requirements are professional services, network management software, supporting hardware, and development tools. Professional services will be procured through existing contracts available to DISA. The DISA Computing Services will be used for hardware and software leased managed services, as well as the NASA enterprise equipment contracting vehicle when necessary and applicable.

The Internet Protocol (IP) enabling of the DRSN DSS-2A switch, Secure voice conference management improvements, HEMP Phone and related DRSN components will use an existing Air Force Command and Control Switching Systems (CCSS) Depot Support contract with the Secure Voice Switch systems manufacturer (Raytheon) to perform the development and modification work, system integration and testing support.

The Mobility initiative supports systems engineering and development of a DoD Mobility solution. The focus is on acquisitions to support the program across the DoD to include scheduling, delivery approach, and risk management. This also includes the vision and phased approach to unified capabilities for classified and unclassified wireless capabilities to meet DoD needs.

E. Performance Metrics

Funds support tech insertion and deployment of two DMCC gateways which will include Top Secret (TS) and Secret capabilities in the remaining CONUS and OCONUS areas requiring gateways to ensure adequate load balancing of mobile device usage on the DoD Mobility Architecture. Will also support evaluation of tech insertion of classified and unclassified data at multiple sites both CONUS and OCONUS. DoD Mobility will evaluate and test the centralized mobility management components for the classified components. Funds will provide support for test and evaluation (T&E) of centralization of the mobile device hardware, software, middleware, and MDM associated capabilities integration efforts. Will provide for T&E of DoD Mobility NIPRNet & SIPRNet Suite insertion efforts to include mobile VPN and authentication,

Exhibit R-2A, RDT&E Project Justification: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

mobile devices, and mobile applications. Will provide for T&E of mobile devices including prototypes for next generation classified devices and additional commercial mobile devices to test their interoperability across the enterprise. Additionally, funds will support T&E of mobile applications to ensure mobile applications are verified and validated prior to hosting on the MAS. Will support testing of commercial mobile devices and certification and accreditation approval. Funds will support quarterly testing and evaluation of various Mobile Initiatives; follow up testing against the Mobile Device Management (MDM); verification and validation testing of devices used against the MDM; and requirements testing to ensure Mobility's requirements have been met. DoD Mobility will continue to evolve detailed Implementation Plans, Concept of Operations and Standard Operating Procedures for DMCC Capabilities.

FY 2017 (Estimated): 100% successful developmental and production testing of commercial mobile devices per product baseline, carrier, and platform authenticated against the Mobile Device Manager. Successful security, interoperability, and functional evaluation of 85% of mobile applications. 100% successful production testing of the applications development framework and integration testing for infrastructure components.

FY 2017 (Met): 100% successfully conducted developmental and production testing of commercial mobile devices per product baseline, carrier, and platform authenticated against the Mobile Device Manager. Successfully conducted security, interoperability, and functional evaluation of 85% of mobile applications. 100% successful conducted production testing of the applications development framework and integration testing for infrastructure components.

FY 2018 (Estimated): 100% successful developmental and production testing of new-model commercial mobile devices per product baseline, per carrier, per platform authenticated against the Mobile Device Manager. Successful security, interoperability, and functional evaluation of at least of 85% of mobile applications requested to be approved and available in the hosted Mobile Application Store. 100% successful production testing of the applications development framework and integration testing for infrastructure components, including additional gateway instances supporting secret and top secret domains as well as any COTS component technology refresh requirements against the end-to-end architecture.

FY 2019 (Estimated): 100% successful developmental and production testing of new-model commercial mobile devices per product baseline, per carrier, per platform authenticated against the Mobile Device Manager. Successful security, interoperability, and functional evaluation of at least of 85% of mobile applications requested to be approved and available in the hosted Mobile Application Store. 100% successful production testing of the applications development framework and integration testing for infrastructure components, including additional gateway instances supporting secret and top secret domains as well as any COTS component technology refresh requirements against the end-to-end architecture.

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency			Date: February 2018
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Systems Engineering for DSRN Components & Peripherals	Various	Raytheon : Florida	11.229	2.565	Feb 2017	0.983	Mar 2018	1.781	Mar 2019	-		1.781	Continuing	Continuing	Continuing
Systems Engineering for IP Enabling DSS-2A Secure Voice Switch	C/T&M	Raytheon : Florida	21.440	-		-		-		-		-	Continuing	Continuing	Continuing
Engineering &Technical Services for Information Sharing Services for Voice	C/T&M	SAIC : VA	2.774	-		-		-		-		-	Continuing	Continuing	Continuing
Engineering & Technical Services for Network Mgmt Solutions for New DISN Element Technologies	C/T&M	Various : VA	2.026	-		-		-		-		-	Continuing	Continuing	Continuing
Single Sign On	C/T&M	SAIC : Various	1.397	-		-		-		-		-	Continuing	Continuing	Continuing
System Engineering for VoSIP	C/T&M	Various : Various	1.218	-		-		-		-		-	Continuing	Continuing	Continuing
Space Vehicle Upload	SS/CPFF	Iridium : McLean, VA	12.635	-		-		-		-		-	Continuing	Continuing	Continuing
Gateway Improvement	SS/CPFF	Iridium : McLean, VA	13.565	-		-		-		-		-	Continuing	Continuing	Continuing
Field Application Tool	MIPR	NSWC : Dahlgren	6.635	-		-		-		-		-	Continuing	Continuing	Continuing
DTCS Handset	SS/CPFF	Iridium : McLean, VA	5.850	-		-		-		-		-	Continuing	Continuing	Continuing
Command and Control Handset	SS/CPFF	Iridium : McLean, VA	7.275	-		-		-		-		-	Continuing	Continuing	Continuing
Alt. Supplier Development	MIPR	NSWC : Dahlgren, VA	3.450	-		-		-		-		-	Continuing	Continuing	Continuing
Radio Only Interface	MIPR	NSWC : Dahlgren, VA	2.525	-		-		-		-		-	Continuing	Continuing	Continuing
Remote Control Unit	SS/CPFF	Iridium : McLean, VA	2.100	-		-		-		-		-	Continuing	Continuing	Continuing
Type 1 Security	SS/CPFF	Iridium : McLean, VA	6.455	-		-		-		-		-	Continuing	Continuing	Continuing
Vehicle Integration	MIPR	NSWC : Dahlgren, VA	3.185	-		-		-		-		-	Continuing	Continuing	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency			Date: February 2018
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / *Long-Haul Communications - DCS*	Project (Number/Name) T82 / *DISN Systems Engineering Support*	

Product Development ($ in Millions)				FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 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
Systems Engineering for IP and Optical Technology Refresh	Various	DITCO : Various	8.717	-		-		-		-		-	Continuing	Continuing	-
Engineering & Technical Services for Web Based Mediation	C/T&M	Apptis : VA	1.168	-		-		-		-		-	-	-	-
System Engineering and Technical Services for ISOM	Various	DITCO : Various	2.915	-		-		-		-		-	-	-	-
Serialized Asset Management - OSS	C/T&M	SAIC : VA	0.822	-		-		-		-		-	-	-	-
Gateways - Mobility	TBD	TBD : TBD	7.107	-		-		-		-		-	-	-	-
Thin Client Solution - Mobility	TBD	TBD : TBD	2.154	-		-		-		-		-	-	-	-
New Field Communications	C/FFP	TBD : TBD	0.550	-		-		-		-		-	-	-	-
National Conference Management	MIPR	USAF : Ratheon	4.514	-		-		-		-		-	-	-	-
IP Enable DRSN	MIPR	USAF : Ratheon	1.562	-		1.408	Feb 2018	-		-		-	-	-	-
HEMP Phone Development	TBD	Raytheon : TBD	0.869	-		-		-		-		-	-	-	-
100G Optical	TBD	TBD : TBD	0.337	-		-		-		-		-	-	-	-
Defense Production Act III Optical Networking	TBD	TBD : TBD	2.666	-		-		-		-		-	Continuing	Continuing	-
DoD Mobility Capability Service Assurance	C/FFP	TBD : TBD	2.316	-		-		-		-		-	-	-	-
TBD	TBD	TBD : TBD	-	-		-		-		-		-	Continuing	Continuing	-
TBD	TBD	*** PERFORMING ACTIVITY *** : *** LOCATION ***	-	-		2.420	Feb 2018	-		-		-	Continuing	Continuing	-
System Engineering Support DMCC/DMUC	C/FFP	JHU-APL : NAVSEA	-	-		-		-		-		-	Continuing	Continuing	-

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency			Date: February 2018
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Product Development ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
System Engineering Support DMCC/DMUC	C/FFP	BAH : TBD	-	-		2.000	Feb 2018	1.972	Feb 2019	-		1.972	Continuing	Continuing	-
DIUx-Mobility APP Vetting and MSM tools (MTD)	MIPR	TBD : TBD	-	-		-		1.470	Feb 2019	-		1.470	Continuing	Continuing	-
TBD	C/TBD	SPAWAR : TBD	-	-		-		0.897	Feb 2019	-		0.897	Continuing	Continuing	-
		Subtotal	139.456	2.565		6.811		6.120		-		6.120	Continuing	Continuing	N/A

Support ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
IT Support - Mobility	C/FFP	Arieds, LLC : Ft. Meade	2.300	-		-		-		-		-	-	-	-
NS2 SE Support - Mobility	C/FFP	APPTIS : Ft. Meade	0.311	-		-		-		-		-	-	-	-
IT Support - Mobility	Various	TBD : TBD	3.000	-		-		-		-		-	-	-	-
		Subtotal	5.611	-		-		-		-		-	-	-	N/A

Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
Certification Testing	Various	JITC : Various	6.649	1.593	Oct 2016	-		-		-		-	Continuing	Continuing	Continuing
Test & Evaluation Support - Mobility	Various	JITC : Ft. Meade	5.010	0.897	Oct 2016	-		0.286	Feb 2019	-		0.286	-	-	-
Integration, Test ann Modification - Mobility	Various	TBD : TBD	5.217	1.941	Nov 2016	-		-		-		-	-	-	-
Tech Refresh/Functionality Testing	MIPR	Multiple : Various	-	-		-		-		-		-	Continuing	Continuing	Continuing
Tech Refresh/Functionality Testing	MIPR	Naval Observatory : MA	-	-		-		-		-		-	-	-	Continuing

Exhibit R-3, RDT&E Project Cost Analysis: PB 2019 Defense Information Systems Agency		Date: February 2018
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Test and Evaluation ($ in Millions)

Cost Category Item	Contract Method & Type	Performing Activity & Location	Prior Years	FY 2017 Cost	FY 2017 Award Date	FY 2018 Cost	FY 2018 Award Date	FY 2019 Base Cost	FY 2019 Base Award Date	FY 2019 OCO Cost	FY 2019 OCO Award Date	FY 2019 Total Cost	Cost To Complete	Total Cost	Target Value of Contract
OSS/Functionality-Configuration	MIPR	Multiple : Various	-	-		-		-		-		-	Continuing	Continuing	Continuing
DISN Tech Refresh	TBD	TBD : TBD	-	5.000	Jan 2017	-		5.226	Jan 2019	-		5.226	-	-	-
Various	TBD	TBD : TBD	-	-		5.422	Jan 2018	-		-		-	Continuing	Continuing	-
		Subtotal	16.876	9.431		5.422		5.512		-		5.512	Continuing	Continuing	N/A

	Prior Years	FY 2017		FY 2018		FY 2019 Base		FY 2019 OCO		FY 2019 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals	161.943	11.996		12.233		11.632		-		11.632	Continuing	Continuing	N/A

Remarks

Exhibit R-4, RDT&E Schedule Profile: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

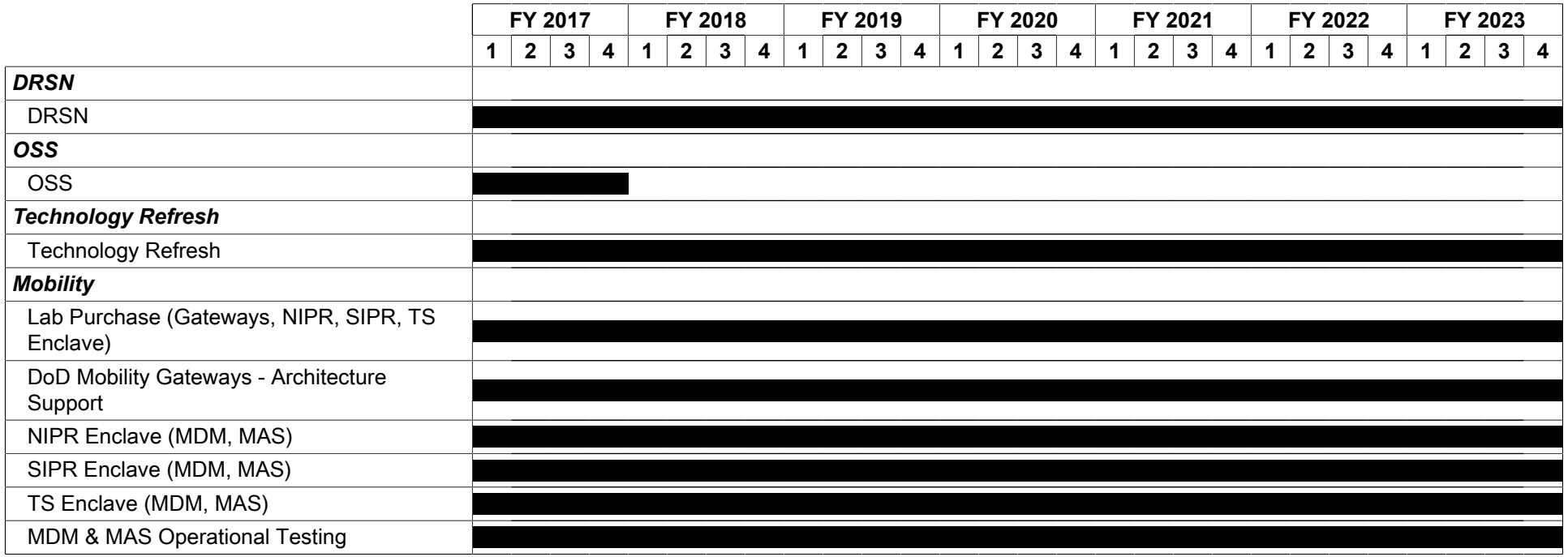

Exhibit R-4A, RDT&E Schedule Details: PB 2019 Defense Information Systems Agency		Date: February 2018
Appropriation/Budget Activity 0400 / 7	**R-1 Program Element (Number/Name)** PE 0303126K / *Long-Haul Communications - DCS*	**Project (Number/Name)** T82 / *DISN Systems Engineering Support*

Schedule Details

	Start		End	
Events by Sub Project	**Quarter**	**Year**	**Quarter**	**Year**
DRSN				
DRSN	1	2017	4	2023
OSS				
OSS	1	2017	4	2017
Technology Refresh				
Technology Refresh	1	2017	4	2023
Mobility				
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)	1	2017	4	2023
DoD Mobility Gateways - Architecture Support	1	2017	4	2023
NIPR Enclave (MDM, MAS)	1	2017	4	2023
SIPR Enclave (MDM, MAS)	1	2017	4	2023
TS Enclave (MDM, MAS)	1	2017	4	2023
MDM & MAS Operational Testing	1	2017	4	2023