

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Information Systems Agency										Date: February 2015		
Appropriation/Budget Activity					R-1 Program Element (Number/Name)							
0400: Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development					PE 0303126K / Long-Haul Communications - DCS							
COST (\$ in Millions)	Prior Years	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
Total Program Element	147.007	45.536	25.325	36.883	-	36.883	15.221	15.163	14.631	14.761	Continuing	Continuing
PC01: Presidential and National Voice Conferencing/	27.691	25.704	5.866	22.630	-	22.630	3.222	3.215	3.217	3.215	Continuing	Continuing
T82: DISN Systems Engineering Support	119.316	19.832	19.459	14.253	-	14.253	11.999	11.948	11.414	11.546	Continuing	Continuing

A. Mission Description and Budget Item Justification

The Defense Information Systems Network (DISN) is the Department of Defense's (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 Internet Protocol 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; other activities in support of the DRSN communications capabilities.

PNVC: The PNVC (formerly called National Emergency Action Decision Network)) 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.

UNCLASSIFIED

Exhibit R-2, RDT&E Budget Item Justification: PB 2016 Defense Information Systems Agency	Date: February 2015
---	----------------------------

Appropriation/Budget Activity 0400: <i>Research, Development, Test & Evaluation, Defense-Wide / BA 7: Operational Systems Development</i>	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications - DCS</i>
---	---

B. Program Change Summary (\$ in Millions)	FY 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total
Previous President's Budget	30.940	25.355	18.756	-	18.756
Current President's Budget	45.536	25.325	36.883	-	36.883
Total Adjustments	14.596	-0.030	18.127	-	18.127
• Congressional General Reductions	-	-			
• Congressional Directed Reductions	-	-			
• Congressional Rescissions	-	-			
• Congressional Adds	-	-			
• Congressional Directed Transfers	-	-			
• Reprogrammings	-	-			
• SBIR/STTR Transfer	-	-			
• Other Adjustments	14.596	-0.030	18.127	-	18.127

Change Summary Explanation

The FY 2014 increase of +\$14.596 is a result of initial funding for aircraft variants of the PNVC baseband equipment. Initiated new versions of the Multi-stream Summing Device and the Baseband Interface Group to meet airborne environmental requirements

The FY 2015 decrease of -\$0.030 results from reduced development efforts on the DISN Information Sharing Services Portal.

The FY 2016 increase of +\$18.127 is the result of one-time funding increase to the Presidential and National Voice Conferencing (PNVC) to complete the redesign of PNVC baseband equipment for the presidential aircraft. The increase is partially offset by completion of the DISN OSS development projects.

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency										Date: February 2015		
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
PC01: Presidential and National Voice Conferencing/	27.691	25.704	5.866	22.630	-	22.630	3.222	3.215	3.217	3.215	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 2014	FY 2015	FY 2016
Title: Presidential and National Voice Conferencing (PNVC) (formerly called National Emergency Action Decision Network (NEADN))	25.704	5.866	22.630
<p>Description: Presidential and National Voice Conferencing (PNVC) (formerly called National Emergency Action Decision Network (NEADN)) 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.</p>			
<p>FY 2014 Accomplishments: Hardware development of the Audio Conferencing Equipment and Baseband Interface Group (BIG) continued, along with the software development of the AEHF conference management features of the PNVC capability. PNVC BIG development models were delivered and began interface testing with other joint AEHF assets. Contract preparations and initial development of aircraft variants of the PNVC baseband equipment (Multi-stream Summing Device and Baseband Interface Group).</p>			
<p>FY 2015 Plans: Will continue activities to realize successful completion of audio conferencing equipment, Baseband Interface Group (BIG), and baseband kits component development. Initial PNVC Engineering Develop Models (EDMs) and DISA funded pre-production units will be tested at various facilities by different organizations. The Joint Interoperability Test Command (JITC) in Ft Huachuca, AZ secures voice test facility that will be used to test the audio baseband equipment with the DRSN Switch, and also test the baseband kits. An Air Force Satellite Communications (SATCOM) testing facility in Colorado Springs, CO will be used for air testing. NSA will conduct testing of the BIG for cryptologic functions and testing will be completed at JITC in Ft Huachuca, AZ for</p>			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) PC01 / <i>Presidential and National Voice Conferencing/</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
<p>interoperability with the rest of the baseband audio equipment. Support planning for aircraft integration activities undertaken by the Air Force E-4B and Navy E-6B, by providing assistance to facilitate integration of the audio baseband equipment as it affects the overall PNVC capability.</p> <p>The decrease of -\$19.838 from FY 2014 to FY 2015 is due to a removal of one-time reprogramming action (-\$15.000) to initiate the presidential aircraft capability upgrade as well as the planned completion of the key development efforts on the Baseband band Kit (-\$4.838), a HEMP protected transit case that will be used by the PNVC Special-user community.</p> <p>FY 2016 Plans: Continue to perform integration and testing of the pre-production units for BIG and the Audio Conferencing Equipment at the JITC and Colorado Springs test facilities. These efforts will lead into the initial testing of the production units. Will also provide systems engineering and testing support to integrate baseband kits to the military aircrafts, Air Force E-4B and Navy E-6B.</p> <p>The increase of +\$16.764 from FY 2015 to FY 2016 is due to development of airborne variants of the PNVC baseband equipment for Air Force and Navy platforms. New versions of the Multi-stream Summing Device and the Baseband Interface Group are being developed to meet airborne environmental requirements.</p>			
Accomplishments/Planned Programs Subtotals		25.704	5.866
C. Other Program Funding Summary (\$ in Millions)			
Line Item	FY 2014	FY 2015	FY 2016
			Base
			OCO
			Total
			FY 2017
			FY 2018
			FY 2019
			FY 2020
			Complete
			Total Cost
• Procurement, DW/PE 0303126K: <i>Procurement, Defense-Wide</i>	5.300	7.695	1.435
			-
			1.435
			1.487
			1.496
			1.620
			-
			Continuing
			Continuing
Remarks			
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			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) PC01 / <i>Presidential and National Voice Conferencing/</i>
<p>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.</p> <p>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.</p> <p>Performance Metrics:</p> <p>Project Support Deliverables received on time</p> <p>FY14 (actual result): 100% FY15 (expected result): 100% FY16 (expected result): 100%</p> <p>Product Deliverable Milestones completed on time</p> <p>FY14 (actual result): 100% FY15 (expected result): 100% FY16 (expected result): 100%</p> <p>Successfully Tested Requirements:</p> <p>FY14 (actual result): N/a FY15 (expected result): 95% FY16 (expected result): 95%</p> <p>Critical Trouble Reports > 6 months old</p> <p>FY14 (actual result): N/a FY15 (expected result): ≤ 4 FY16 (expected result): ≤ 4</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
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)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
BIG Development Preparation	MIPR	NSA : Various	14.676	5.299	May 2014	2.000	Feb 2015	-		-		-	Continuing	Continuing	N/A
MSD-III Development	C/T&M	Raytheon : Largo, FL	8.479	3.000	May 2014	-		-		-		-	Continuing	Continuing	N/A
PNVC Baseband Equipment	TBD	Various : Various	0.000	3.200	Apr 2014	1.707	Apr 2015	-		-		-	Continuing	Continuing	N/A
Systems Engineering	FFRDC	Mitre : McLean, VA	0.423	-		-		-		-		-	Continuing	Continuing	N/A
PNVC Baseband Airborne variant ECP	C/CPFF	Raytheon : Largo, FL	0.000	11.880	Jun 2014	-		20.396	Nov 2015	-		20.396	Continuing	Continuing	N/A
Systems Engineering	C/CPFF	Booz, Allen, Hamilton : McLean, VA	1.200	-		-		-		-		-	-	1.200	1.200
Subtotal			24.778	23.379		3.707		20.396		-		20.396	-	-	-
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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	C/CPFF	Booz Allen Hamilton : McLean, VA	0.539	1.500	Oct 2013	1.334	Jan 2015	1.034	Nov 2015	-		1.034	Continuing	Continuing	N/A
Systems Engineering	FFRDC	Mitre : McLean, VA	0.000	0.450	Dec 2013	0.450	Jan 2015	0.450	Nov 2015	-		0.450	Continuing	Continuing	N/A
Subtotal			0.539	1.950		1.784		1.484		-		1.484	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Certification Testing	MIPR	Various : Various	1.624	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			1.624	-		-		-		-		-	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
Appropriation/Budget Activity 0400 / 7						R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS				Project (Number/Name) PC01 / <i>Presidential and National Voice Conferencing/</i>					
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Management Services	FFRDC	Aerospace Corporation : Falls Church, VA	0.750	0.375	Nov 2013	0.375	Dec 2014	0.750	Nov 2015	-		0.750	Continuing	Continuing	Continuing
Subtotal			0.750	0.375		0.375		0.750		-		0.750	-	-	-
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			27.691	25.704		5.866		22.630		-		22.630	-	-	-
Remarks															

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Information Systems Agency										Date: February 2015			
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/			

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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>PNVC/DRSN Specification Development</i>																												
Baseband Enclosure																												
<i>PNVC/DRSN Interface Equip Dev</i>																												
Conference Mgt Software																												
<i>PNVC System Testing</i>																												
PNVC System																												

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Information Systems Agency			Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) PC01 / <i>Presidential and National Voice Conferencing/</i>	

Schedule Details

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
<i>PNVC/DRSN Specification Development</i>				
Baseband Enclosure	2	2014	2	2016
<i>PNVC/DRSN Interface Equip Dev</i>				
Conference Mgt Software	3	2014	4	2016
<i>PNVC System Testing</i>				
PNVC System	1	2015	4	2019

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency										Date: February 2015		
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
T82: DISN Systems Engineering Support	119.316	19.832	19.459	14.253	-	14.253	11.999	11.948	11.414	11.546	Continuing	Continuing
Quantity of RDT&E Articles	-	-	-	-	-	-	-	-	-	-		

A. Mission Description and Budget Item Justification

The DISN Systems Engineering Support project encompasses four activities:

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 IP and optical technologies. These new technologies provide protected and assured services for mobility and 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 2014	FY 2015	FY 2016
Title: IP & Optical Transport (a component of Tech Refresh)	6.414	3.442	3.442
FY 2014 Accomplishments: Completed Phase III and continued final Phase IV of the secure voice conference management improvements development with expected delivery in April 2015. Fielded infrastructure to allow secure classified mobile connections from the commercial network to multiple consolidated entry points into the DoD/DISN network. Funding enabled DoD to stay current on technology in the commercial market for small mobile devices that can provide unclassified communications to the end user. Funding also supported the testing of emerging technologies for new devices.			
FY 2015 Plans:			

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) T82 / <i>DISN Systems Engineering Support</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
<p>Will support DISA's 100G optical project that provides technical evaluation of 100G optical networking solutions. The Optical project supports the Joint Information Environment (JIE) by allowing end-to-end communications, consolidating network capabilities, and providing network normalization, consolidation, and information sharing. Will support the Defense Production Act Title III Optical Networking Project, for which DISA is a member, that's focus is to improve capability and security of optical long haul networks. The Title III project supports DISA's 100G Optical networking, and higher bandwidth requirements of the JIE.</p> <p>The decrease of -\$2.972 from FY 2014 to FY 2015 results from the completion of Phase III of the secure voice conference management improvement efforts.</p> <p>FY 2016 Plans: Purchase and test commercially available components to replace end of life/obsolete equipment deployed on the DISN. Focus will be on optical and IP routers, switches and Communications Security (COMSEC) equipment. Will also continue functionality testing of 100G-capable commercial components with a focus on streamlining the overall DISN architecture profile.</p>			
<p>Title: DISN OSS</p> <p>FY 2014 Accomplishments: Initiated systems engineering support for development of the Personal Digital Assistant (PDA)-184 software, a data communications application that provides effective and efficient communications transport using local Radio Frequency (RF) via line of sight communications or over standard Integrated Waveform (IW) satellite communications channel globally. Deliverables included: independent verification and validation (IV&V) and analysis, software development, procedures and standard development, interface development, and development testing and evaluation.</p> <p>FY 2015 Plans: Completion of web procedures in support of Information Sharing Services. Will continue development of web modules and other web services in support of Information Sharing Services. Web applications developed throughout FY 2015 will be primarily focused on external customers based (e.g., Combatant Commands, Military Services, and Agency (CC/S/A)) Service Level Agreements defined and developed in FY 2013. Critical aspects of OSS Central will also be fully implemented, which will include system assurance and operationally driven customer focused modules. Will also provide continued support for Unified Capabilities with an emphasis on support for the integration of order entry, order management and configuration management for improved provisioning workflow and accurate and efficient of services to DISN customers.</p> <p>The increase of +\$0.346 from FY 2014 to FY 2015 will support the integration of order entry, order management and configuration management tools for the DISN.</p> <p>FY 2016 Plans: No planned accomplishment.</p>		0.777	1.123
			-

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015		
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 2014	FY 2015	FY 2016
The decrease of -\$1.123 results from the draw down of development activities for the DISN Operations Support Systems.				
Title: Peripheral and Component Design FY 2014 Accomplishments: Continued the efforts initiated in FY 2013, including progress on an Engineering Change Proposal (ECP) for refreshing the obsolete HEMP phone, other parts and end of life software. Completed two ECPs for DRSN peripherals. FY 2015 Plans: Funding will continue to support regular design and development of upgrades and replacements for various components of DRSN Multi-Level Secure Voice Systems to deal with changing user requirements and technology end of life issues for components and peripherals. It is expected that one switch circuit card and one peripheral will be addressed in FY 2015. The increase of +\$0.262 from FY 2014 to FY 2015 is for a planned increase to the ECP support effort. These proposals support development and testing of replacements for switch components and peripherals that have obsolete parts, and replace them in order to maintain the system viability. FY 2016 Plans: Perform integration and testing of the production units of switch IP Media cards (developed in FY12-14) to ensure compatibility with VoIP/VoSIP capabilities. Continue ECP effort from FY2015 to modify software to support full capabilities in to improve reliability and performance supporting transition to IP trunking between switches.		1.632	1.894	1.894
Title: Mobility FY 2014 Accomplishments: Provided international capability for secure voice, new device development and integration. Completed a prototype for PKE capability, test and development of authentication capabilities, and derived credentials. Development of mobile application framework, mobile content management, and security and lab architecture. Conducted field assessment testing of new capabilities. FY 2015 Plans: DoD Mobility efforts include tech insertion and deployment of two (2) Device Mobile Classified Capability (DMCC) gateways OCONUS which will include Top Secret (TS) and Secret capabilities in the Pacific and Southwest Asia. In addition, tech insertion of TS data at two (2) CONUS sites, St. Louis, MO and San Antonio, TX will be completed. DoD Mobility will evaluate and test the centralized mobility management components for the Classified Components. Efforts to be tested and evaluated include centralization of the mobile device hardware, software, and middleware, and the Mobile Device Management (MDM) capabilities integration efforts realizing efficiencies across the DoD Mobile Enterprise. Testing and Evaluation of DoD Mobility NIPRNet Suite		11.009	13.000	8.917

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015	
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) T82 / <i>DISN Systems Engineering Support</i>	
B. Accomplishments/Planned Programs (\$ in Millions)		FY 2014	FY 2015
<p>insertion efforts to include Mobile VPN and Authentication, Mobile devices and Mobile Applications. Testing and Evaluation of Mobile Devices includes prototypes for next generation Classified Devices and additional Commercial Mobile Devices to test their interoperability across the Enterprise. Additionally, Mobile Applications will be tested and evaluated after purchase to ensure Mobile Applications are verified and validated prior to hosting on the Enterprise Mobile Application Store (MAS).</p> <p>The increase +\$1.991 from FY 2014 to FY 2015 is due to increased testing and evaluation activities for DoD Mobility NIPRNet Suite insertion efforts.</p> <p>FY 2016 Plans: 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, 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.</p> <p>Decrease of -\$4.083 from FY 2015 to FY 2016 is a pre planned reduction commensurate with the decreased testing requirements as the DoD Mobility Unclassified Capability (DMUC) continues to mature as planned post IOC which occurred January 2014. Additionally, as both the DMUC and DMCC Capabilities continue to mature in FY 2015 and beyond testing requirements will continue to decrease consistent with previously planned funding requirements.</p>			
Accomplishments/Planned Programs Subtotals		19.832	19.459
		14.253	

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency									Date: February 2015		
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 2014	FY 2015	FY 2016 Base	FY 2016 OCO	FY 2016 Total	FY 2017	FY 2018	FY 2019	FY 2020	Cost To Complete	Total Cost
• O&M/PE0303126K: Operation & Maintenance, Defense-Wide	73.766	75.015	70.604	-	70.604	72.480	74.029	-	-	Continuing	Continuing
• Procurement/PE0303126K: Procurement, Defense-Wide	120.257	77.564	79.136	-	79.136	97.847	118.657	120.025	-	Continuing	Continuing
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.											
E. Performance Metrics											
DISN OSS: Funding provides development in DISN information sharing services that will be provided by the OSS Central web site. The objective is to develop OSS Central as the predominate interface for information sharing services for DISN customers. As a result of the development of information sharing capabilities, there will be an increase in OSS Central users. The following estimates provide the development of OSS Central Service Support procedures and the growth in OSS Central users.											
OSS Central – Information Sharing Modules (cum.)											
FY 2014 Actual: 14 Modules											
FY 2015 Target: 14 Modules											
FY 2016 Target: N/A											
OSS Central – System Users (cum.)											
FY 2014 Actual: 5,000 Users											
FY 2015 Target: 6,800 Users											

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) T82 / <i>DISN Systems Engineering Support</i>
<p>FY 2016 Target: N/A</p> <p>Customer Interface Center (CIC) FY 2014 Actual: N/A FY 2015 Target: N/A FY 2016 Target: N/A</p> <p>COTS solution for customer orders FY 2014 – 14 info sharing procedures, 10,000 users (71% of estimated user base complete) FY2015 – 6,800 Users FY2016 - COTS solution for customer orders</p> <p>The development of web procedures supports Information Sharing Services for both internal and external DISN users based on defined user group requirements. This metric supports the evolution of DISN users to OSS Central by providing Information Sharing Services.</p> <p>Tech Refresh: On time and on budget performance of contracted development at least 95% of the time. Meets acquisition milestones and agreed to schedule for delivery and testing. Component replacement development: Meets acquisition milestones and agreed schedule for delivery and testing at least 95% of the time. Measured using Earned Value Management with CPI > 1 and SPI >1</p> <p>Tech Refresh:</p> <p>Defense Production Act Title II Optical Networking Project FY 2014 Target: Develop migration strategy FY 2015 Target: Develop migration strategy FY 2016 Target: Develop migration strategy</p> <p>100G Optical FY 2014 Target: N/A FY 2015 Target: 100G Optical Solution FY 2016 Target: 100G Optical Solution</p> <p>DISN OSS – UC and Mobility FY 2014: N/A FY 2015: COTS solution for UC and Mobility FY 2016: NA</p>		

UNCLASSIFIED

Exhibit R-2A, RDT&E Project Justification: PB 2016 Defense Information Systems Agency		Date: February 2015
Appropriation/Budget Activity 0400 / 7	R-1 Program Element (Number/Name) PE 0303126K / <i>Long-Haul Communications</i> - DCS	Project (Number/Name) T82 / <i>DISN Systems Engineering Support</i>
<p>DRSN: Will perform on time and within the restricted budget performance of contracted development at least 95% of the time. Will meet the agreed schedule for Systems Requirements Review (SRR), Preliminary Design Review (PDR), Critical Design Review (CDR), delivery and testing. Component replacement development meets the agreed schedule for SRR, PDR, CDR, delivery and testing at least 95% of the time.</p> <p>Mobility: FY 2015 – Test commercial mobile devices and receive official, written approval (DISA certification and accreditation and security) within three months. Also includes testing and evaluation of three initiatives every quarter: one-off demonstrations follow up testing against the Mobile Device Management (MDM), verification of devices used against the MDM and requirements testing to ensure Mobility’s requirements have been met. Mobility will produce a detailed Implementation Plan, Concept of Operations and Standard Operating Procedures, for the Device Mobile Classified Capability (DMCC); by second quarter of FY 2015. Beyond this, the four identified DMCC Suites will be operational in the 2nd and 3rd Quarter of FY 2015.</p> <p>FY 2016 – Continue Test and Evaluation 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 to include three Mobility initiatives every quarter 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. Beyond this, the four identified DMCC Suites will be operational and scaled to meet updated user population in the 2nd and 3rd Quarter of FY 2016.</p>		

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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 DSRN Components & Peripherals	Various	Raytheon : Florida	7.083	1.661	Mar 2014	1.894	Mar 2015	1.894	Feb 2016	-		1.894	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	1.818	0.208		0.577	May 2015	-		-		-	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

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
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 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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	5.386	3.331	May 2014	3.442	May 2015	-		-		-	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	2.500	0.415	May 2014	0.546	May 2015	-		-		-	-	-	-
Serialized Asset Management - OSS	C/T&M	SAIC : VA	0.614	0.208	Apr 2014	-		-		-		-	-	-	-
Gateways - Mobility	TBD	TBD : TBD	-	3.529	Mar 2014	3.578	Jan 2015	-		-		-	-	-	-
Thin Client Solution - Mobility	TBD	TBD : TBD	0.300	1.000	Nov 2013	1.000	Nov 2014	-		-		-	-	-	-
New Field Communications	C/FFP	TBD : TBD	-	0.550	Jan 2014	0.550	Jan 2015	-		-		-	-	-	-
National Conference Management	MIPR	USAF : Ratheon	1.851	2.663	Jan 2014	-		-		-		-	-	-	-
IP Enable DRSN	MIPR	USAF : Ratheon	1.562	-		-		-		-		-	-	-	-
HEMP Phone Development	TBD	Raytheon : TBD	0.869	-		-		-		-		-	-	-	-
100G Optical	TBD	TBD : TBD	-	0.337	May 2014	-		-		-		-	-	-	-
Defense Production Act III Optical Networking	TBD	TBD : TBD	-	-		-		3.442		-		3.442	-	-	-
DoD Mobility Capability Service Assurance	C/FFP	TBD : TBD	-	-		1.942	Jan 2015	-		-		-	-	-	-
Subtotal			113.655	13.902		13.529		5.336		-		5.336	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency												Date: February 2015			
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					
Support (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
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	Jan 2014	3.000	Jan 2015	-		-		-	-	-	-
Subtotal			2.611	3.000		3.000		-		-		-	-	-	-
Test and Evaluation (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Certification Testing	Various	JITC : Various	2.450	-		-		2.810	Oct 2015	-		2.810	Continuing	Continuing	Continuing
Test & Evaluation Support - Mobility	Various	JITC : Ft. Meade	0.600	0.930	Oct 2013	0.930	Oct 2014	0.930	Oct 2015	-		0.930	-	-	-
Integration, Test adn Modification - Mobility	Various	TBD : TBD	-	2.000	Nov 2013	2.000	Nov 2014	5.177	Nov 2015	-		5.177	-	-	-
Tech Refresh/Functionality Testing	MIPR	Multiple : Various	-	-		-		-		-		-	Continuing	Continuing	Continuing
Tech Refresh/Functionality Testing	MIPR	Naval Observatory : MA	-	-		-		-		-		-	-	-	Continuing
OSS/Functionality-Configuration	MIPR	Multiple : Various	-	-		-		-		-		-	Continuing	Continuing	Continuing
Subtotal			3.050	2.930		2.930		8.917		-		8.917	-	-	-
Management Services (\$ in Millions)				FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 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
Subtotal			-	-		-		-		-		-	-	-	-

UNCLASSIFIED

Exhibit R-3, RDT&E Project Cost Analysis: PB 2016 Defense Information Systems Agency											Date: February 2015				
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					
			Prior Years	FY 2014		FY 2015		FY 2016 Base		FY 2016 OCO		FY 2016 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			119.316	19.832		19.459		14.253		-		14.253	-	-	-

Remarks

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Information Systems Agency										Date: February 2015			
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			

	FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
	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
DRSN																												
DRSN																												
OSS																												
OSS																												
Technology Refresh																												
Technology Refresh																												
Mobility																												
Unclassified Pilot -Phase1 Spiral 3 (1500 deployed devices)																												
Unclassified Pilot -Phase 2 (5000 deployed devices)																												
DoD Mobility Lab (Mirrors Operational Capability)																												
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)																												
CONUS Gateway Deployment																												
Operational Capability: DoD Mobility Gateways																												
OCONUS Gateway Deployment																												
Operational Capability: NIPR Enclave (MDM, MAS) (50,000 Deployed Devices Capability)																												
MDM Deployment for up to 50,000 users																												
MAS Deployment for up to 50,000 users																												
Operational Capability: SIPR Enclave (MDM, MAS) End State 5,000 Deployed Devices																												
MDM Deployment for up to 5,000 users																												

UNCLASSIFIED

Exhibit R-4, RDT&E Schedule Profile: PB 2016 Defense Information Systems Agency																				Date: February 2015																	
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																			
										FY 2014				FY 2015				FY 2016				FY 2017				FY 2018				FY 2019				FY 2020			
										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
MAS Deployment for up to 5,000 users																																					
Operational Capability: TS Enclave (MDM, MAS) (End State: 1,000 Deployed Devices)																																					
MDM Deployment for up to 1,000 users																																					
MAS Deployment for up to 1,000 users																																					

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Information Systems Agency			Date: February 2015
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

Events by Sub Project	Start		End	
	Quarter	Year	Quarter	Year
DRSN				
DRSN	1	2015	4	2016
OSS				
OSS	1	2015	4	2016
Technology Refresh				
Technology Refresh	1	2015	4	2016
Mobility				
Unclassified Pilot -Phase1 Spiral 3 (1500 deployed devices)	1	2015	4	2016
Unclassified Pilot -Phase 2 (5000 deployed devices)	2	2015	4	2016
DoD Mobility Lab (Mirrors Operational Capability)	1	2015	4	2016
Lab Purchase (Gateways, NIPR, SIPR, TS Enclave)	1	2015	4	2016
CONUS Gateway Deployment	1	2015	4	2016
Operational Capability: DoD Mobility Gateways	1	2015	4	2016
OCONUS Gateway Deployment	1	2015	4	2016
Operational Capability: NIPR Enclave (MDM, MAS) (50,000 Deployed Devices Capability)	1	2015	4	2016
MDM Deployment for up to 50,000 users	1	2015	1	2016
MAS Deployment for up to 50,000 users	1	2015	4	2016
Operational Capability: SIPR Enclave (MDM, MAS) End State 5,000 Deployed Devices	1	2015	4	2016
MDM Deployment for up to 5,000 users	1	2015	4	2016
MAS Deployment for up to 5,000 users	1	2015	4	2016
Operational Capability: TS Enclave (MDM, MAS) (End State: 1,000 Deployed Devices)	1	2015	4	2016

UNCLASSIFIED

Exhibit R-4A, RDT&E Schedule Details: PB 2016 Defense Information Systems Agency			Date: February 2015		
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	
		Start		End	
Events by Sub Project		Quarter	Year	Quarter	Year
MDM Deployment for up to 1,000 users		1	2015	4	2016
MAS Deployment for up to 1,000 users		1	2015	4	2016